

## NODE ATTRIBUTES:

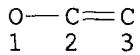
DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 4

## STEREO ATTRIBUTES: NONE

L8 STR 2



## NODE ATTRIBUTES:

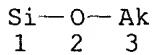
DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 3

## STEREO ATTRIBUTES: NONE

L11 STR 3



## NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED  
 ECOUNT IS M2 C AT 3

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 3

## STEREO ATTRIBUTES: NONE

L13	<u>4820</u>	SEA FILE=REGISTRY SSS FUL	L7 AND L8 AND L11
L14	<u>161</u>	SEA FILE=REGISTRY ABB=ON	L13 AND PMS/CI
L16	<u>133</u>	SEA FILE=REGISTRY ABB=ON	L14 NOT 1-10/N,S
L17	<u>83</u>	SEA FILE=HCAPLUS ABB=ON	L16
L19	<u>96</u>	SEA FILE=HCAPLUS ABB=ON	L14
L20	<u>0</u>	SEA FILE=HCAPLUS ABB=ON	L19 AND RADIAT?
L21	<u>68</u>	SEA FILE=HCAPLUS ABB=ON	L17(L) (PREP OR IMF OR SPN)/RL
L22	<u>18</u>	SEA FILE=HCAPLUS ABB=ON	L17 AND CUR?
L23	<u>13</u>	SEA FILE=HCAPLUS ABB=ON	L21 AND L22
L24	<u>0</u>	SEA FILE=HCAPLUS ABB=ON	L17 AND PHOTINITI?
L25	<u>36</u>	SEA FILE=HCAPLUS ABB=ON	L17 AND (COMPOSITION? OR COMPNS)
L26	<u>26</u>	SEA FILE=HCAPLUS ABB=ON	L21 AND L25
L27	<u>18</u>	SEA FILE=HCAPLUS ABB=ON	L26 AND COATING?/SC, SX
L28	<u>24</u>	SEA FILE=HCAPLUS ABB=ON	L20 OR L23 OR L24 OR L27
L29	<u>12</u>	SEA FILE=HCAPLUS ABB=ON	L21 AND (?CURAB? OR ?CURED? OR ?CURING?)
L30	<u>25</u>	SEA FILE=HCAPLUS ABB=ON	L28 OR L29

=> D L30 ALL 1-25 HITSTR

4, 820 structures from  
 the 3 structure fragments  
 in the query. This picks  
 up structural repeating units  
 (claim 3) or the monomers  
 which make up the  
 polymers. (CA usually  
 indexes polymers  
 by monomers)

25 CA references  
 with prep. etc

L30 ANSWER 1 OF 25 HCAPLUS COPYRIGHT 2002 ACS  
 AN 2002:503657 HCAPLUS  
 DN 137:63624  
 TI Polymeric photopolymerization initiators without production of odor and **photocurable** materials  
 IN Kobayashi, Masamori; Kashio, Mikihiro  
 PA Lintec Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 11 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C08F002-50  
 ICS C08F002-44; C08F297-02; C08F299-02  
 CC 35-3 (Chemistry of Synthetic High Polymers)  
 Section cross-reference(s): 38  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002187906	A2	20020705	JP 2000-388482	20001221
AB	The initiators comprise copolymers of vinyl monomers having a functional group generating radical by irradn of actinic ray and comonomers. Thus, an adhesive tape having adhesive compn. contg. 100 g 40% AcOEt soln. of 90:5:5 Bu acrylate-styrene-acrylic acid copolymer, 4.00 g trimethylolpropane triacrylate, and 0.350 g Bu acrylate-4-(2-acryloyloxyethoxy)phenyl(2-hydroxy-2-propyl)ketone (ZLI 3331) copolymer showed 180.degree. peeling strength 1.3 N/25 mm after irradiating UV.				
ST	polymeric photopolymn initiator; styrene vinylacetophenone block copolymer photopolymn initiator; butyl acrylate polymer trimethylolpropane acrylate <b>photocurable</b> material; adhesive sheet <b>photocurable</b>				
IT	Polyurethanes, preparation RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (acrylates, for adhesive sheet; polymeric photopolymn. initiators without prodn. of odor and <b>photocurable</b> materials)				
IT	Adhesives (sheets; polymeric photopolymn. initiators without prodn. of odor and <b>photocurable</b> materials)				
IT	438526-97-7P, Acrylic acid-butyl acrylate-styrene-trimethylolpropane triacrylate copolymer 439667-49-9P, Lauryl acrylate-Viscotac UV 4117F copolymer RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (for adhesive sheet; polymeric photopolymn. initiators without prodn. of odor and <b>photocurable</b> materials)				
IT	137494-61-2DP, deprotected	438526-96-6P, Butyl acrylate-ZLI 3331	block copolymer RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses) (photopolymn. initiator; polymeric photopolymn. initiators without prodn. of odor and <b>photocurable</b> materials)		
IT	10537-63-0P	84494-81-5P	137494-47-4P RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (polymeric photopolymn. initiators without prodn. of odor and <b>photocurable</b> materials)		
IT	1073-67-2,	4-Chlorostyrene RL: RCT (Reactant); RACT (Reactant or reagent) (polymeric photopolymn. initiators without prodn. of odor and <b>photocurable</b> materials)			
IT	137494-61-2DP, deprotected				

RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP  
**(Preparation)**; USES (Uses)  
 (photopolymer. initiator; polymeric photopolymer. initiators without  
 prodn. of odor and photocurable materials)

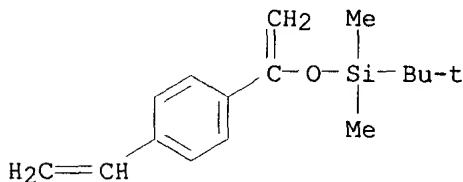
RN 137494-61-2 HCAPLUS

CN Silane, (1,1-dimethylethyl)[[1-(4-ethenylphenyl)ethenyl]oxy]dimethyl-,  
 polymer with ethenylbenzene, block (9CI) (CA INDEX NAME)

CM 1

CRN 137494-47-4

CMF C16 H24 O Si



CM 2

CRN 100-42-5

CMF C8 H8

 $\text{H}_2\text{C}=\text{CH}-\text{Ph}$ 

L30 ANSWER 2 OF 25 HCAPLUS COPYRIGHT 2002 ACS

AN 2002:63646 HCAPLUS

DN 136:119973

TI Curable fluororesin coating compositions

IN Imoto, Katsuhiro; Yonei, Yasushi; Wada, Susumu; Mitsuhasha, Hiroo; Senda,  
 Akira; Honda, Kayoko; Mori, Haruhiko

PA Daikin Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D127-12

ICS C08F002-06; C08F214-18; C08F216-08; C08F216-14; C08F220-28;  
 C08F230-08; C09D161-20; C09D175-04

CC 42-10 (Coatings, Inks, and Related Products)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 2002020675 A2 20020123 JP 2000-202741 20000704

OS MARPAT 136:119973

AB Title compns., with good storage stability, contain alc.-based org. solvents and curable fluororesins prep'd. from fluoroolefins, hydrolyzable silyl-contg. vinyl compds., OH-contg. vinyl compds., and other polymerizable compds. A compn. contg. 4-hydroxybutyl vinyl ether-isobutylene-tetrafluoroethylene-vinyl pivalate-vinyltrimethoxysilane copolymer, propylene glycol mono-Pr ether,

xylene, Cymel 1130, and a Sn catalyst showed good storage stability at 50 degree. for 2 mo and was sprayed on metal or concrete plates to form a film with good adhesion, soil resistance (6 mo at outdoor), gloss retention (3000 h, sunshine weatherometer) 98%.

ST storage stability fluororesin coating glycol monoether solvent; alc solvent fluororesin coating storage stability; adhesion fluororesin coating glycol monoether solvent; soil weather resistance fluororesin coating glycol monoether solvent

IT Glycols, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (ethers, mono-; fluororesin coatings contg. alc.- or glycol monoether-based solvents for storage stability)

IT Fluoropolymers, uses  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (fluororesin coatings contg. alc.- or glycol monoether-based solvents for storage stability)

IT Alcohols, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (fluororesin coatings contg. alc.- or glycol monoether-based solvents for storage stability)

IT Ethers, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (glycol, mono-; fluororesin coatings contg. alc.- or glycol monoether-based solvents for storage stability)

IT Aminoplasts  
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
 (in coatings; fluororesin coatings contg. alc.- or glycol monoether-based solvents for storage stability)

IT Coating materials  
 (storage-stable; fluororesin coatings contg. alc.- or glycol monoether-based solvents for storage stability)

IT Concrete  
 (substrates; fluororesin coatings contg. alc.- or glycol monoether-based solvents for storage stability)

IT Metals, miscellaneous  
 RL: MSC (Miscellaneous)  
 (substrates; fluororesin coatings contg. alc.- or glycol monoether-based solvents for storage stability)

IT 390801-58-8P, 4-Hydroxybutyl vinyl ether-isobutylene-tetrafluoroethylene-vinyl pivalate-vinyltrimethoxysilane copolymer 390801-60-2P, 4-Hydroxybutyl vinyl ether-isobutylene-tetrafluoroethylene-vinyl pivalate-vinyltrimethoxysilane-Vestanat B 1358A copolymer  
**390801-62-4P**, 4-Hydroxybutyl vinyl ether-isobutylene-tetrafluoroethylene-vinyl pivalate-vinyltrimethoxysilane-Coronate HX copolymer 390801-64-6P, Chlorotrifluoroethylene-ethyl vinyl ether-4-hydroxybutyl vinyl ether-vinyltriisopropenylmethoxysilane-.gamma.-isocyanatopropyltrimethoxysilane copolymer 390801-67-9P, Chlorotrifluoroethylene-ethyl vinyl ether-4-hydroxybutyl vinyl ether-vinyltriisopropenylmethoxysilane-Vestanat B 1358A copolymer  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (fluororesin coatings contg. alc.- or glycol monoether-based solvents for storage stability)

IT 30136-13-1, Propylene glycol monopropyl ether  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (fluororesin coatings contg. alc.- or glycol monoether-based solvents for storage stability)

IT 9003-08-1, Cymel 1130  
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
 (in coatings; fluororesin coatings contg. alc.- or glycol monoether-based solvents for storage stability)

IT 390801-66-8P, 4-Hydroxybutyl vinyl ether-tetrafluoroethylene-vinyl pivalate-Coronate HX copolymer  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (sic, not as described in claim, missing hydrolyzable silane monomer; fluororesin coatings contg. alc.- or glycol monoether-based solvents for storage stability)

IT 154532-81-7P, Hexafluoropropylene-4-hydroxybutyl vinyl ether-isobutylene-vinyl 2,2,-dimethylpropanoate copolymer  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (sic; fluororesin coatings contg. alc.- or glycol monoether-based solvents for storage stability)

IT 7429-90-5, Aluminum, miscellaneous 12597-68-1, Stainless steel, miscellaneous  
 RL: MSC (Miscellaneous)  
 (substrates; fluororesin coatings contg. alc.- or glycol monoether-based solvents for storage stability)

IT 390801-62-4P, 4-Hydroxybutyl vinyl ether-isobutylene-tetrafluoroethylene-vinyl pivalate-vinyltriethoxysilane-Coronate HX copolymer  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (fluororesin coatings contg. alc.- or glycol monoether-based solvents for storage stability)

RN 390801-62-4 HCPLUS

CN Propanoic acid, 2,2-dimethyl-, ethenyl ester, polymer with Coronate HX, 4-(ethenoxy)-1-butanol, ethenyltriethoxysilane, 2-methyl-1-propene and tetrafluoroethene (9CI) (CA INDEX NAME)

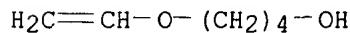
CM 1

CRN 144245-98-7  
 CMF Unspecified  
 CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

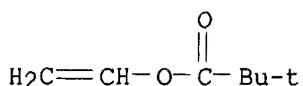
CM 2

CRN 17832-28-9  
 CMF C6 H12 O2

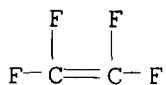


CM 3

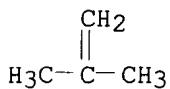
CRN 3377-92-2  
 CMF C7 H12 O2



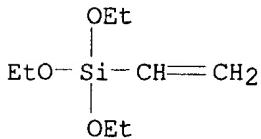
CM 4

CRN 116-14-3  
CMF C2 F4

CM 5

CRN 115-11-7  
CMF C4 H8

CM 6

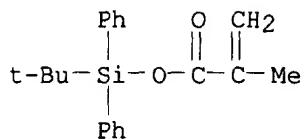
CRN 78-08-0  
CMF C8 H18 O3 Si

L30 ANSWER 3 OF 25 HCPLUS COPYRIGHT 2002 ACS  
AN 2000:43471 HCPLUS  
DN 132:109435  
TI Antifouling water-resistant acrylic resin coating **compositions**  
IN Mouri, Kiyomi; Oka, Masayuki; Masuoka, Shigeru  
PA Nitto Kasei Co., Ltd., Japan; Nippon Oil and Fats Co., Ltd.  
SO Jpn. Kokai Tokkyo Koho, 11 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM C09D005-16  
ICS C09D143-04; C09D155-00; C09D157-04; C08F220-14; C08F220-26;  
C08F230-08; C08F246-00; C08F290-06  
CC 42-7 (**Coatings, Inks, and Related Products**)  
Section cross-reference(s): 5  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000017203	A2	20000118	JP 1998-190205	19980706
AB	<p>Title <b>compns.</b> contain acrylic resins prep'd. from 10-80% CH:CR1COOSiR2R3R4 (R1 = H, Me; R2-R4 = alkyl, aryl or aralkyl, with at least one of them = C<sub>2</sub>-C<sub>6</sub> branched or cyclic alkyl, aryl or aralkyl) and 0.1-30% C<sub>2</sub>-C<sub>6</sub> alkoxylated and/or phenoxylated (meth)acrylates, and 19.9-80% other ethylenic unsatd. compds. A <b>compn.</b> contg. pigments, antifouling agents, xylene, and 30:5:15:50 isopropylidiphenylsilyl acrylate-2-ethylhexyl acrylate-4-hydroxybutyl acrylate-Me methacrylate copolymer showed good adhesion to PVC panels and antifouling ability over 2 yr.</p>				
ST	antifouling coating silyl acrylate polymer water resistance; plastic adhesion antifouling coating alkoxyalted acrylic polymer				
IT	<p>Coating materials            (antifouling; silyl- and alkoxylated (or phenoxylated)            (meth)acrylate-based resin-contg. antifouling coatings)</p>				
IT	<p>Acrylic polymers, uses            RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)            (silyl- and alkoxylated (or phenoxylated) (meth)acrylate-based resin-contg. antifouling coatings)</p>				
IT	<p>Molded plastics, miscellaneous            RL: MSC (Miscellaneous)            (substrates, good adhesion; silyl- and alkoxylated (or phenoxylated) (meth)acrylate-based resin-contg. antifouling coatings)</p>				
IT	<p>255385-19-4P, Butyl acrylate-2-hydroxyethyl acrylate-methyl methacrylate-tris(isopropyl)silyl acrylate copolymer 255385-21-8P            255385-22-9P 255385-23-0P 255385-24-1P <b>255385-25-2P</b>            255385-26-3P            RL: IMF (Industrial manufacture); POF (Polymer in formulation);            TEM (Technical or engineered material use); PREP (Preparation);            USES (Uses)            (silyl- and alkoxylated (or phenoxylated) (meth)acrylate-based resin-contg. antifouling coatings)</p>				
IT	<p>9002-86-2, PVC            RL: MSC (Miscellaneous)            (substrates, good adhesion; silyl- and alkoxylated (or phenoxylated) (meth)acrylate-based resin-contg. antifouling coatings)</p>				
IT	<p><b>255385-25-2P</b>            RL: IMF (Industrial manufacture); POF (Polymer in formulation);            TEM (Technical or engineered material use); PREP (Preparation);            USES (Uses)            (silyl- and alkoxylated (or phenoxylated) (meth)acrylate-based resin-contg. antifouling coatings)</p>				
RN	255385-25-2 HCPLUS				
CN	2-Propenoic acid, 2-methyl-, (1,1-dimethylethyl)diphenylsilyl ester, polymer with ethenyl acetate, ethenylbenzene, methyl 2-methyl-2-propenoate and .alpha.- (2-methyl-1-oxo-2-propenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)				

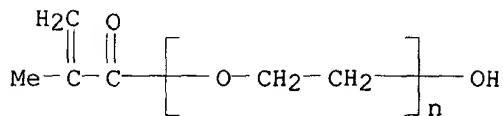
CM 1

CRN 158619-42-2  
 CMF C20 H24 O2 Si



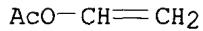
CM 2

CRN 25736-86-1  
 CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>4</sub> H<sub>6</sub> O<sub>2</sub>  
 CCI PMS



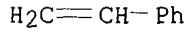
CM 3

CRN 108-05-4  
 CMF C<sub>4</sub> H<sub>6</sub> O<sub>2</sub>



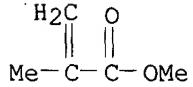
CM 4

CRN 100-42-5  
 CMF C<sub>8</sub> H<sub>8</sub>



CM 5

CRN 80-62-6  
 CMF C<sub>5</sub> H<sub>8</sub> O<sub>2</sub>



L30 ANSWER 4 OF 25 HCPLUS COPYRIGHT 2002 ACS  
 AN 1999:698288 HCPLUS  
 DN 131:323925  
 TI Water-thinned coating **compositions** containing polysiloxane polyoxyalkylene block copolymers

KATHLEEN FULLER EIC 1700/LAW LIBRARY 308-4290

IN Marumoto, Etsuzou; Inukai, Hiroshi  
 PA Toa Gosei Chemical Industry Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF

DT Patent  
 LA Japanese  
 IC ICM C09D201-00  
 ICS C09D127-12; C09D133-06; C09D183-10; C09D183-12  
 CC 42-10 (Coatings, Inks, and Related Products)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11302600	A2	19991102	JP 1998-124001	19980417
AB	The compn. having good gloss, staining, weather and water resistance, and storage stability, comprises (A) 100 parts base resin (such as fluoropolymer or acrylic silicon resin), (B) 35-85 parts polyoxyalkylene-polyorganosiloxane block polymer [- $(Si(R)2O)aSi(R)2Z0(CnH2nO)bZ-c$ ] (R = monovalent polymerizable hydrocarbon group; Z = divalent org. group; a, b .gtoreq.4; c .gtoreq.2; n = 2-4), and (C) 0.1-100 parts silica sol having particle diam. .1toreq.10 .mu.m. Thus, 100 parts base resin contg. chlorotrifluoroethylene-cyclohexyl vinyl ether-Et vinyl ether-polyoxyethylene allyl ether (PKA 5003) copolymer, TiO2 and other additive was mixed with ABN Silwet F 1-009-11 (polysiloxane-polyoxyalkylene block copolymer) 7 and Snowtex 40 (silica sol) 15 parts, coated on a aluminum plate and dried at room temp. for 1 wk, showing gloss 77 and good staining, weather and water resistance, and storage stability.				
ST	water thinned coating staining resistance; fluoropolymer silica sol coating weather resistance; acrylic silicon resin coating storage stability; polysiloxane polyoxyalkylene block copolymer coating gloss				
IT	Polysiloxanes, uses RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (acrylic; water-thinned coating compns. contg. polysiloxane polyoxyalkylene block copolymers)				
IT	Polysiloxanes, uses Polysiloxanes, uses RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (fluorine-contg.; water-thinned coating compns. contg. polysiloxane polyoxyalkylene block copolymers)				
IT	Polysiloxanes, uses Polysiloxanes, uses RL: MOA (Modifier or additive use); USES (Uses) (polyoxyalkylene-, block; water-thinned coating compns. contg. polysiloxane polyoxyalkylene block copolymers)				
IT	Polyoxyalkylenes, uses Polyoxyalkylenes, uses RL: MOA (Modifier or additive use); USES (Uses) (polysiloxane-, block; water-thinned coating compns. contg. polysiloxane polyoxyalkylene block copolymers)				
IT	Fluoropolymers, uses Fluoropolymers, uses RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polysiloxane-; water-thinned coating compns. contg. polysiloxane polyoxyalkylene block copolymers)				
IT	Fluoropolymers, uses RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)				

(water-thinned coating compns. contg. polysiloxane polyoxyalkylene block copolymers)

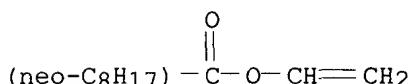
IT	Coating materials (water-thinned; water-thinned coating compns. contg. polysiloxane polyoxyalkylene block copolymers)
IT	7631-86-9, Snowtex 40, uses RL: MOA (Modifier or additive use); USES (Uses) (colloidal; water-thinned coating compns. contg. polysiloxane polyoxyalkylene block copolymers)
IT	99716-61-7P, Butyl acrylate-butyl methacrylate-methacryloyloxypropyl trimethoxysilane-methyl methacrylate copolymer 130175-80-3P, Voncoat EC 818 178437-63-3P, Chlorotrifluoroethylene-cyclohexyl vinyl ether-ethyl vinyl ether-PKA 5003 copolymer 182484-90-8P RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (water-thinned coating compns. contg. polysiloxane polyoxyalkylene block copolymers)
IT	182484-90-8P RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (water-thinned coating compns. contg. polysiloxane polyoxyalkylene block copolymers)
RN	182484-90-8 HCPLUS
CN	Benzoic acid, 4-(1,1-dimethylethyl)-, ethenyl ester, polymer with chlorotrifluoroethene, ethenyl neononanoate, ethenyl propanoate, 2-propenoic acid and 3-(triethoxysilyl)propyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 54423-67-5

CMF C11 H2O O2

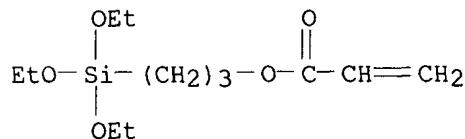
CCI IDS



CM 2

CRN 20208-39-3

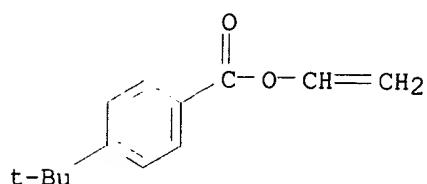
CMF C12 H24 05 Si



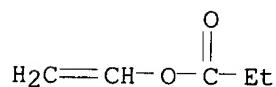
CM 3

CRN 15484-80-7

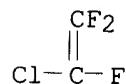
CMF C13 H16 O2



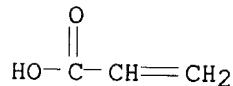
CM 4

CRN 105-38-4  
CMF C5 H8 O2

CM 5

CRN 79-38-9  
CMF C2 Cl F3

CM 6

CRN 79-10-7  
CMF C3 H4 O2

L30 ANSWER 5 OF 25 HCPLUS COPYRIGHT 2002 ACS  
 AN 1999:583366 HCPLUS  
 DN 131:215684  
 TI Stain-resistant water-based paint composition  
 IN Inukai, Hiroshi; Marumoto, Etsuko; Iida, Akito  
 PA Toa Gosei Chemical Industry Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D201-00

ICS C09D005-02; C09D005-16; C09D127-12; C09D131-00; C09D133-04;  
C09D143-04; C09D183-04; C08F004-04; C08F299-02; C09D171-00

CC 42-6 (Coatings, Inks, and Related Products)  
Section cross-reference(s): 35

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11246826	A2	19990914	JP 1998-69570	19980304
AB	Title compn. comprises (A) an aq. emulsive resin 100, (B) a block copolymer 0.1-100 prep'd. by radical polymn. of monomers contg. .gtoreq.50 wt% polyoxyalkylene (meth)acrylate in the presence of polymeric azo-compd. initiator having the repeat unit of {CO(CH <sub>2</sub> )2C(CH <sub>3</sub> )(CN)N:NC(CH <sub>3</sub> )(CN)(CH <sub>2</sub> )2CONH(CH <sub>2</sub> )3Si(CH <sub>3</sub> ) <sub>2</sub> [OSi(CH <sub>3</sub> ) <sub>2</sub> ]x(CH <sub>2</sub> ) <sub>3</sub> NH} (x: integer 10-500), and (C) a silica sol of .ltoreq.10 .mu.m particle diam. 0.1-100 parts. Thus, a water-based coating was formulated. from fluoro resin-based white paint 100, block copolymer emulsion (33 wt% solids) 20 prep'd. by polymg. M230G (methoxypolyoxyethylene glycol methacrylate) in the presence of VPS 0501 (polymeric azo compd.), and Snowtex 40 (silica sol) 15 g, showing glossiness 77, weatherability 99%, contact angles 48 (water) and 138 (hexadecane), staining resistance (.DELTA.L) -4, and good water resistance and storage stability.				
ST	stain resistant water paint compn; fluorocopolymer water paint compn; polyoxyalkylene methacrylate block copolymer water paint compn; polymeric azo compd water paint; colloidal silica water paint				
IT	Polysiloxanes, uses RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (acrylic, paint contg.; prepn. of stain-resistant water-based paint)				
IT	Coating materials (antistaining; prepn. of stain-resistant water-based paint)				
IT	Polysiloxanes, uses Polysiloxanes, uses RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (fluorine-contg., paint contg.; prepn. of stain-resistant water-based paint)				
IT	Emulsifying agents (paint contg.; prepn. of stain-resistant water-based paint)				
IT	Polyoxyalkylenes, uses Polyoxyalkylenes, uses RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyamide-, block, paint contg.; prepn. of stain-resistant water-based paint)				
IT	Polysiloxanes, uses RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyamide-polyoxyalkylene-, block, paint contg.; prepn. of stain-resistant water-based paint)				
IT	Polyoxyalkylenes, uses RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyamide-polysiloxane-, block, paint contg.; prepn. of stain-resistant water-based paint)				

IT Polyamides, uses  
 Polyamides, uses  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (polyoxyalkylene-, block, paint contg.; prepn. of stain-resistant water-based paint)

IT Polysiloxanes, uses  
 Polysiloxanes, uses  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (polyoxyalkylene-, block, paint contg.; prepn. of stain-resistant water-based paint)

IT Polyamides, uses  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (polyoxyalkylene-polysiloxane-, block, paint contg.; prepn. of stain-resistant water-based paint)

IT Polyoxyalkylenes, uses  
 Polyoxyalkylenes, uses  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (polysiloxane-, block, paint contg.; prepn. of stain-resistant water-based paint)

IT Fluoropolymers, uses  
 Fluoropolymers, uses  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (polysiloxane-, paint contg.; prepn. of stain-resistant water-based paint)

IT Emulsions  
 (prepn. of stain-resistant water-based paint)

IT Polymerization catalysts  
 (radical; for prepn. of stain-resistant water-based paint)

IT Polymerization  
 (radical; prepn. of stain-resistant water-based paint)

IT Paints  
 (water-thinned; prepn. of stain-resistant water-based paint)

IT 158947-07-0, VPS 0501  
 RL: CAT (Catalyst use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)  
 (VPS 0501, VPS 1001, polym. initiator; prepn. of stain-resistant water-based paint)

IT 7631-86-9, Snowtex 40, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (colloidal, paint contg.; prepn. of stain-resistant water-based paint)

IT 9016-45-9, Emulgen 906  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (emulsifier, paint contg.; prepn. of stain-resistant water-based paint)

IT 99716-61-7P **182484-90-8P**, Acrylic acid-acryloyloxypropyltriethoxysilane-vinylp-tert-butylbenzoate-chlorotrifluoroethylene-Veova 9-vinyl propionate copolymer 243659-20-3P, NK Ester M 230G-VPS 0501 block copolymer 243659-21-4P, NK Ester M 230G-.gamma.-methacryloyloxypropyltriethoxysilane-VPS 1001 block copolymer  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (paint contg.; prepn. of stain-resistant water-based paint)

IT 225244-23-5P 242816-03-1P, NK Ester AM 90G-2-hydroxyethyl acrylate-VPS  
 0501 block copolymer  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or  
 engineered material use); PREP (Preparation); USES (Uses)  
 (paint contg.; prepn. of stain-resistant water-based paint)

IT 130175-80-3, Voncoat EC 818  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or  
 engineered material use); USES (Uses)  
 (paint contg.; prepn. of stain-resistant water-based paint)

IT 182484-90-8P, Acrylic acid-acryloyloxypropyltriethoxysilane-vinylp-  
 tert-butylbenzoate-chlorotrifluoroethylene-Veova 9-vinyl propionate  
 copolymer  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 PRP (Properties); TEM (Technical or engineered material use); PREP  
 (Preparation); USES (Uses)  
 (paint contg.; prepn. of stain-resistant water-based paint)

RN 182484-90-8 HCPLUS

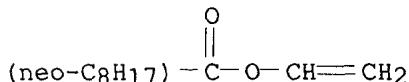
CN Benzoic acid, 4-(1,1-dimethylethyl)-, ethenyl ester, polymer with  
 chlorotrifluoroethene, ethenyl neononanoate, ethenyl propanoate,  
 2-propenoic acid and 3-(triethoxysilyl)propyl 2-propenoate (9CI) (CA  
 INDEX NAME)

CM 1

CRN 54423-67-5

CMF C11 H20 O2

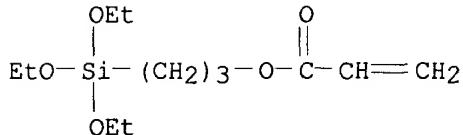
CCI IDS



CM 2

CRN 20208-39-3

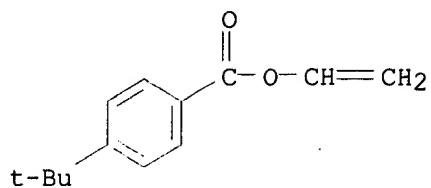
CMF C12 H24 O5 Si



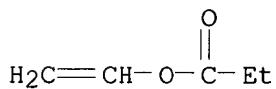
CM 3

CRN 15484-80-7

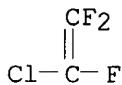
CMF C13 H16 O2



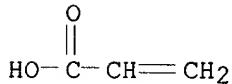
CM 4

CRN 105-38-4  
CMF C5 H8 O2

CM 5

CRN 79-38-9  
CMF C2 Cl F3

CM 6

CRN 79-10-7  
CMF C3 H4 O2

L30 ANSWER 6 OF 25 HCAPLUS COPYRIGHT 2002 ACS  
AN 1999:271140 HCAPLUS  
DN 130:326387  
TI Antifouling coating composition  
IN Masuoka, Shigeru; Ito, Masayasu; Kawamura, Yasushi  
PA Nippon Oil and Fats Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 25 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM C09D005-16  
ICS C09D171-00; C09D193-04; C08F290-06  
CC 42-10 (Coatings, Inks, and Related Products)

## FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11116857	A2	19990427	JP 1997-285531	19971017
AB	The antifouling coating, useful for ship bottom, fishnet, antifouling film, and drainage pipe to prevent the attachment of ocean body on the surface, comprises a rosin or its deriv., a copolymer from an unsatd. monomer contg. triorganosilyl group and an alkoxy- or allyloxy-terminated poly(ethylene glycol), and an antifouling agent. Thus, tert-butyldimethylsilyl acrylate 5, tert-butyldiphenylsilyl acrylate 45, polyethylene glycol acrylate Me ether 10, MMA 35, styrene 5, 20 parts of which was mixed with tall rosin 10 parts, Cu2O 5, 4,5-dichloro-2-n-octylisothiazolin-2-one 10, 2,4,6-trichlorophenyl maleimide 3 and 3-iodo-2-propynylbutylcarbamate 5 parts to make a coating, showing good block resistance, antifouling property and adhesion.				
ST	rosin organosilyl monomer antifouling coating <b>compn</b> ; copper oxide chlorooctylisothiazolinone trichlorophenyl maleimide iodopropynylbutylcarbamate antifouling agent; ship fishnet drainage pipe antifouling coating				
IT	Rosin Tall oil rosin RL: TEM (Technical or engineered material use); USES (Uses) (antifouling coating <b>compn.</b> )				
IT	Fish nets Ships (antifouling coating <b>compn.</b> for)				
IT	Resin acids RL: TEM (Technical or engineered material use); USES (Uses) (calcium salts; antifouling coating <b>compn.</b> )				
IT	Resin acids RL: TEM (Technical or engineered material use); USES (Uses) (copper salts; antifouling coating <b>compn.</b> )				
IT	Pipes and Tubes (drainage; antifouling coating <b>compn.</b> for)				
IT	Rosin RL: TEM (Technical or engineered material use); USES (Uses) (hydrogenated; antifouling coating <b>compn.</b> )				
IT	Rosin RL: TEM (Technical or engineered material use); USES (Uses) (polymd.; antifouling coating <b>compn.</b> )				
IT	Resin acids RL: TEM (Technical or engineered material use); USES (Uses) (zinc salts; antifouling coating <b>compn.</b> )				
IT	1317-39-1, Copper oxide, uses 11101-28-3 13108-52-6, 2,3,5,6-Tetrachloro-4-(methylsulfonyl)pyridine 13167-25-4 13463-41-7, Zinc 2-pyridinethiol 1-oxide 21564-17-0, 2-(Thiocyanomethylthio)benzothi azole 26656-82-6, Copper thiocyanate 55406-53-6, 3-Iodo-2-propynylbutylcarbamate 85413-30-5 154592-20-8 RL: MOA (Modifier or additive use); USES (Uses) (antifouling agent; antifouling coating <b>compn.</b> )				
IT	223770-03-4P 223770-04-5P 223770-05-6P 223770-06-7P 223770-08-9P <b>223770-10-3P 223770-12-5P</b> RL: <b>IMF (Industrial manufacture)</b> ; POF (Polymer in formulation); TEM (Technical or engineered material use); <b>PREP (Preparation)</b> ; USES (Uses) (antifouling coating <b>compn.</b> )				
IT	971-66-4 64359-81-5 RL: MOA (Modifier or additive use); USES (Uses) (antifouling coating <b>compn.</b> )				
IT	<b>223770-10-3P 223770-12-5P</b>				

RL: **IMF (Industrial manufacture)**; POF (Polymer in formulation);  
 TEM (Technical or engineered material use); **PREP (Preparation)**;  
 USES (Uses)

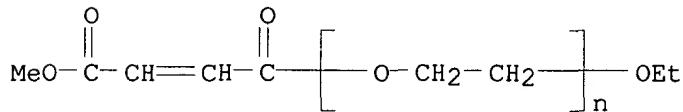
(antifouling coating compn.)

RN 223770-10-3 HCPLUS

CN 2-Butenedioic acid (2E)-, (1,1-dimethylethyl)diphenylsilyl methyl ester,  
 polymer with ethenyl acetate, ethenylbenzene and .alpha.-[(2E)-4-methoxy-  
 1,4-dioxo-2-butenyl]-.omega.-ethoxypoly(oxy-1,2-ethanediyl) (9CI) (CA  
 INDEX NAME)

CM 1

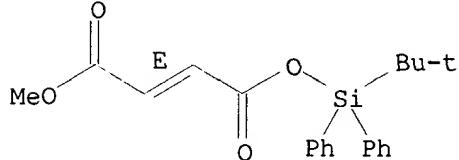
CRN 223770-09-0  
 CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>7</sub> H<sub>10</sub> O<sub>4</sub>  
 CCI PMS



CM 2

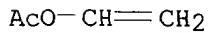
CRN 198013-69-3  
 CMF C<sub>21</sub> H<sub>24</sub> O<sub>4</sub> Si

Double bond geometry as shown.



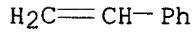
CM 3

CRN 108-05-4  
 CMF C<sub>4</sub> H<sub>6</sub> O<sub>2</sub>



CM 4

CRN 100-42-5  
 CMF C<sub>8</sub> H<sub>8</sub>

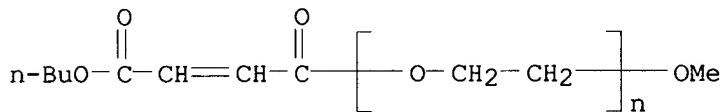


RN 223770-12-5 HCPLUS

CN 2-Butenedioic acid (2Z)-, 3-methylbutyl tris(1-methylethyl)silyl ester, polymer with .alpha.-[(2Z)-4-butoxy-1,4-dioxo-2-butenyl]-.omega.-methoxypoly(oxy-1,2-ethanediyl), ethenyl acetate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

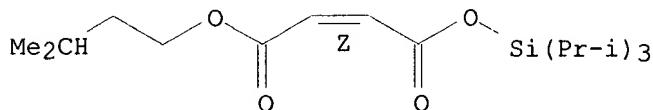
CRN 223770-11-4  
 CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>9</sub> H<sub>14</sub> O<sub>4</sub>  
 CCI PMS



CM 2

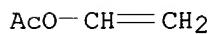
CRN 146268-09-9  
 CMF C<sub>18</sub> H<sub>34</sub> O<sub>4</sub> Si

Double bond geometry as shown.



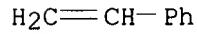
CM 3

CRN 108-05-4  
 CMF C<sub>4</sub> H<sub>6</sub> O<sub>2</sub>



CM 4

CRN 100-42-5  
 CMF C<sub>8</sub> H<sub>8</sub>



L30 ANSWER 7 OF 25 HCPLUS COPYRIGHT 2002 ACS  
 AN 1999:155981 HCPLUS  
 DN 130:238914  
 TI Storage-stable and re-coatable aqueous coating compositions  
 IN Inukai, Hiroshi; Marumoto, Etsuzo; Iida, Akihito  
 PA Toa Gosei Chemical Industry Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D155-00  
 ICS C08F004-04; C08F290-06; C08F299-00; C09D127-12; C09D133-08;  
 C09D153-00; C09D201-00  
 CC 42-10 (Coatings, Inks, and Related Products)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11061030	A2	19990305	JP 1997-230384	19970812
AB	Title compns., useful for in- and outdoor uses contain 100 parts base resins and 0.1-100 parts polymers prep'd. by radical polymn. of CH <sub>2</sub> :CRCO(OR <sub>1</sub> )nOR <sub>2</sub> (R = H, Me; R <sub>1</sub> = alkylene; R <sub>2</sub> = hydrocarbyl; n = 1-30) in the presence of polymeric azo compds. An aq. compn. contg. 100 g acrylic acid-acryloyloxypropyltriethoxysilane-chlorotrifluoroethylene-versatic 9 acid vinyl ester-vinyl p-tert-butylbenzoate-vinyl propionate copolymer, 20 g a NK Ester M 230G polymer prep'd. in the presence of VPS 0501, and Bu <sub>2</sub> Sn dilaurate showed good storage stability at 50.degree. for 1 mo and was coated on an Al plate to form a film with good re-coatability and soil, water, and weather resistance.				
ST	storage stability aq fluoropolymer topcoat polyoxyalkylene acrylic resin; recoatability aq fluoropolymer topcoat polyoxyalkylene acrylic resin; polymeric azo initiator polyoxyalkylene acrylic resin				
IT	Acrylic polymers, uses Fluoropolymers, uses RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (aq. acrylic or fluoro topcoats contg. polyoxyalkylene acrylic block copolymers with storage stability and re-coatability)				
IT	Polymerization catalysts (polymeric azo compds.; aq. acrylic or fluoro topcoats contg. polyoxyalkylene acrylic block copolymers with storage stability and re-coatability)				
IT	Azo compounds RL: CAT (Catalyst use); USES (Uses) (polymeric; aq. acrylic or fluoro topcoats contg. polyoxyalkylene acrylic block copolymers with storage stability and re-coatability)				
IT	Polysiloxanes, uses Polysiloxanes, uses RL: IMF (Industrial manufacture); MOA (Modifier or additive use); POF (Polymer in formulation); PREP (Preparation); USES (Uses) (polyoxyalkylene-, block, acrylic; aq. acrylic or fluoro topcoats contg. polyoxyalkylene acrylic block copolymers with storage stability and re-coatability)				
IT	Polyoxyalkylenes, uses Polyoxyalkylenes, uses RL: IMF (Industrial manufacture); MOA (Modifier or additive use); POF (Polymer in formulation); PREP (Preparation); USES (Uses) (polysiloxane-, block, acrylic; aq. acrylic or fluoro topcoats contg. polyoxyalkylene acrylic block copolymers with storage stability and re-coatability)				
IT	Coating materials (topcoats; aq. acrylic or fluoro topcoats contg. polyoxyalkylene acrylic block copolymers with storage stability and re-coatability)				
IT	158947-07-0, VPS 0501 RL: CAT (Catalyst use); USES (Uses) (aq. acrylic or fluoro topcoats contg. polyoxyalkylene acrylic block copolymers with storage stability and re-coatability)				

IT 221282-10-6P 221282-12-8P 221282-14-0P  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); POF (Polymer in formulation); PREP (Preparation); USES (Uses)  
 (aq. acrylic or fluoro topcoats contg. polyoxyalkylene acrylic block copolymers with storage stability and re-coatability)

IT 84154-41-6P, Butyl acrylate-3-methacryloxypropyltrimethoxysilane-methyl methacrylate-styrene copolymer 99716-61-7P 172358-49-5P  
 186098-05-5P, Acrydic A 801-Coronate HX copolymer 221278-54-2P  
 221282-18-4P  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (aq. acrylic or fluoro topcoats contg. polyoxyalkylene acrylic block copolymers with storage stability and re-coatability)

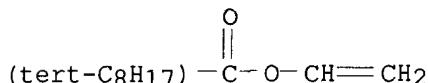
IT 221278-54-2P  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (aq. acrylic or fluoro topcoats contg. polyoxyalkylene acrylic block copolymers with storage stability and re-coatability)

RN 221278-54-2 HCPLUS

CN Benzoic acid, 4-(1,1-dimethylethyl)-, ethenyl ester, polymer with chlorotrifluoroethene, ethenyl tert-nonanoate, ethenyl propanoate, 2-propenoic acid and 3-(triethoxysilyl)propyl 2-propenoate (9CI) (CA INDEX NAME)

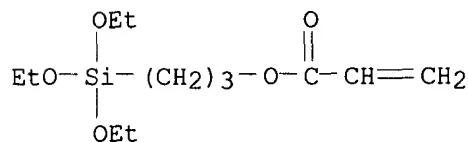
CM 1

CRN 103230-34-8  
 CMF C11 H20 O2  
 CCI IDS



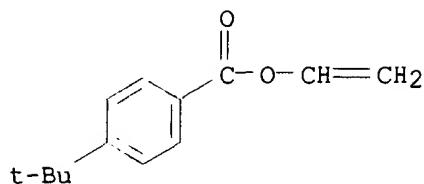
CM 2

CRN 20208-39-3  
 CMF C12 H24 O5 Si

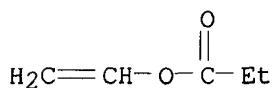


CM 3

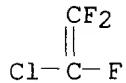
CRN 15484-80-7  
 CMF C13 H16 O2



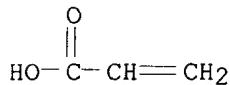
CM 4

CRN 105-38-4  
CMF C5 H8 O2

CM 5

CRN 79-38-9  
CMF C2 Cl F3

CM 6

CRN 79-10-7  
CMF C3 H4 O2

L30 ANSWER 8 OF 25 HCPLUS COPYRIGHT 2002 ACS  
 AN 1999:155980 HCPLUS  
 DN 130:253747  
 TI Aqueous fluororesin coating compositions with soil, water, and weather resistance  
 IN Marumoto, Etsuko; Iida, Akito; Inukai, Hiroshi  
 PA Toa Gosei Chemical Industry Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D127-12  
 ICS C09D005-00; C09D127-12; C09D183-12

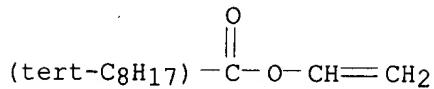
CC 42-10 (Coatings, Inks, and Related Products)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11061028	A2	19990305	JP 1997-230378	19970812
AB	Title compns. contain 1-20% (based on 100 parts fluororesins) polyoxyalkylene-polyorganosiloxane block copolymers contg. 35-85% the polysiloxane segments. An aq. compn. contg. 100 g chlorotrifluoroethylene-cyclohexyl vinyl ether-Et vinyl ether-Nissan Uniox PKA 5003 copolymer and 5 g ABN Silwet F 1 009 11 was coated on an acrylic polyurethane-coated Al plate and dried at room temp. for 1 wk to form a plate showing good soil resistance (6 mo, at outdoor) and 60.degree. gloss 70% with 90% retention after 1 wk in 40.degree. water or 2,000 h under weatherometer.				
ST	water weather soil resistance aq fluoro coating polyoxyalkylene polysiloxane				
IT	Acrylic polymers, uses RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (fluorine-contg.; polyoxyalkylene-polysiloxane-contg. aq. fluororesin coatings with soil and water and weather resistance)				
IT	Polysiloxanes, uses Polysiloxanes, uses RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses) (polyoxyalkylene-, block, ABN Silwet F 1-009-11, ABN Silwet F 1-009-2, ABN Silwet FZ 2222; polyoxyalkylene-polysiloxane-contg. aq. fluororesin coatings with soil and water and weather resistance)				
IT	Fluoropolymers, uses RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyoxyalkylene-polysiloxane-contg. aq. fluororesin coatings with soil and water and weather resistance)				
IT	Polyoxyalkylenes, uses Polyoxyalkylenes, uses RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses) (polysiloxane-, block, ABN Silwet F 1-009-11, ABN Silwet F 1-009-2, ABN Silwet FZ 2222; polyoxyalkylene-polysiloxane-contg. aq. fluororesin coatings with soil and water and weather resistance)				
IT	Coating materials (topcoats; polyoxyalkylene-polysiloxane-contg. aq. fluororesin coatings with soil and water and weather resistance)				
IT	178437-63-3P 221278-54-2P 221278-55-3P RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyoxyalkylene-polysiloxane-contg. aq. fluororesin coatings with soil and water and weather resistance)				
IT	221278-54-2P RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyoxyalkylene-polysiloxane-contg. aq. fluororesin coatings with soil and water and weather resistance)				
RN	221278-54-2 HCAPLUS				
CN	Benzoic acid, 4-(1,1-dimethylethyl)-, ethenyl ester, polymer with chlorotrifluoroethene, ethenyl tert-nonanoate, ethenyl propanoate, 2-propenoic acid and 3-(triethoxysilyl)propyl 2-propenoate (9CI) (CA INDEX NAME)				

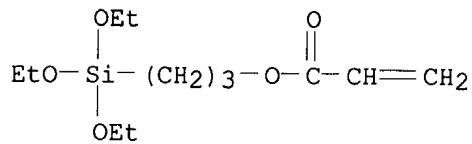
CM 1

CRN 103230-34-8  
CMF C11 H20 O2  
CCI IDS



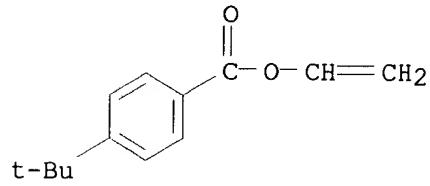
CM 2

CRN 20208-39-3  
CMF C12 H24 O5 Si



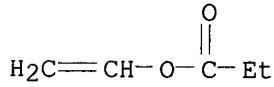
CM 3

CRN 15484-80-7  
CMF C13 H16 O2



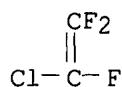
CM 4

CRN 105-38-4  
CMF C5 H8 O2

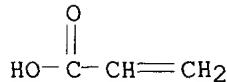


CM 5

CRN 79-38-9  
CMF C2 Cl F3



CM 6

CRN 79-10-7  
CMF C3 H4 O2

L30 ANSWER 9 OF 25 HCPLUS COPYRIGHT 2002 ACS

AN 1998:705979 HCPLUS

DN 129:331531

TI Aqueous silylated polymer **curable** compositions with tin catalysts

IN Chen, Ming J.; Osterholtz, Frederick D.

PA OSI Specialties, Inc., USA

SO U.S., 12 pp., Cont.-in-part of U.S. 5,621,038.  
CODEN: USXXAM

DT Patent

LA English

IC ICM C08L083-00

NCL 524837000

CC 37-6 (Plastics Manufacture and Processing)

FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5827922	A	19981027	US 1997-808113	19970228
	US 5621038	A	19970415	US 1995-452163	19950526

PRAI US 1995-452163 A2 19950526

OS MARPAT 129:331531

AB **Curable** compns. comprise stable, water dispersible, **curable** polymers contg. sterically hindered alkoxyLATED silane groups at 0.1-75% of the total compn.; a water-dispersible or water-sol., hydrolytically stable organotin catalyst, at 0.1-10% of the total compn.; and water at 99.8-24.9%. These compns. are useful as adhesives, sealants and paints. The compns. have improved properties including solvent resistance, adhesion, hardness, abrasion resistance and mar resistance. Particular catalysts for use herein include mercaptoalc., mercaptide and sulfide forms of diorganotins having either a Sn-S or Sn:S bond, and include dibutyltin dimercaptide and dibutyltin bis(1-thioglycerol).

ST tin catalyst alkoxySilane polymer **curable**

IT Crosslinking catalysts

(aq. silylated polymer **curable** compns. with tin catalysts)

IT Polysiloxanes, preparation

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(aq. silylated polymer **curable** compns. with tin catalysts)IT 818-08-6, Dibutyltin oxide 1185-81-5, FOMREZ UL-32 5286-13-5  
31685-54-8, FOMREZ UL-1 74913-27-2, FOMREZ UL-22 215172-42-2

RL: CAT (Catalyst use); USES (Uses)

(aq. silylated polymer **curable** compns. with tin catalysts)

IT 189458-70-6P, Butyl acrylate-3-methacryloxypropyltriisopropoxysilane-vinyl acetate copolymer **189458-72-8P**, Butyl acrylate-3-methacryloxypropyltri-isobutoxysilane-vinyl acetate copolymer  
 189458-73-9P, Butyl acrylate-3-(methacryloxypropyl)trioctoxysilane-vinyl acetate copolymer **189458-74-0P**, Butyl acrylate-vinyl acetate-vinyltri-isobutoxysilane copolymer **189458-75-1P**, Butyl acrylate-vinyl acetate-vinyltri-tert-butoxysilane copolymer

RL: **IMF (Industrial manufacture)**; POF (Polymer in formulation);  
 TEM (Technical or engineered material use); **PREP (Preparation)**;  
 USES (Uses)

(aq. silylated polymer **curable** compns. with tin catalysts)

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; JP 625502 1989
- (2) Anon; EP 0401496 1992 HCPLUS
- (3) Backderf; US 3706697 1972 HCPLUS
- (4) Bourne, T; Feasibility if Using Alkoxysilane-Functional Monomers 1982
- (5) Bredow; US 5017632 1991 HCPLUS
- (6) Buning; US 3629214 1971
- (7) Buning; US 3755252 1973 HCPLUS
- (8) Buning; US 3821174 1974 HCPLUS
- (9) Burzynski; US 3449293 1969 HCPLUS
- (10) Chang; US 4684697 1987 HCPLUS
- (11) Chen; US 5621038 1997 HCPLUS
- (12) Cietek; US 4719194 1988 HCPLUS
- (13) de Long; US 4049869 1977 HCPLUS
- (14) Gander; US 4062451 1977
- (15) Hadlock; US 3499870 1969
- (16) Kawakubo; US 4687818 1987 HCPLUS
- (17) Kawakubo; US 4788254 1988 HCPLUS
- (18) Keogh; US 4526930 1985 HCPLUS
- (19) Lutz, M; Methyltrimethoxysilane Modification of Organic Latexes 1979
- (20) Ohashi; US 4778624 1988 HCPLUS
- (21) Ona; US 4399247 1983 HCPLUS
- (22) Plesich; US 3729438 1973 HCPLUS
- (23) Plesich; US 3814716 1974 HCPLUS
- (24) Pons; US 5100955 1992 HCPLUS
- (25) Sage; US 4309326 1982 HCPLUS
- (26) Schmuck; US 5196054 1993 HCPLUS
- (27) Suzuki; US 5226954 1993 HCPLUS
- (28) Tarshiani; US 5385955 1995 HCPLUS
- (29) Temple; US 4394418 1983 HCPLUS
- (30) Volkmar; US 5599597 1997 HCPLUS
- (31) Walker; US 4716194 1987 HCPLUS
- (32) Wilson; US 4877654 1989 HCPLUS
- (33) Wilson; US 4889747 1989 HCPLUS
- (34) Witucki; US 4818779 1989 HCPLUS

IT **189458-72-8P**, Butyl acrylate-3-methacryloxypropyltri-isobutoxysilane-vinyl acetate copolymer **189458-74-0P**, Butyl acrylate-vinyl acetate-vinyltri-isobutoxysilane copolymer **189458-75-1P**, Butyl acrylate-vinyl acetate-vinyltri-tert-butoxysilane copolymer

RL: **IMF (Industrial manufacture)**; POF (Polymer in formulation);  
 TEM (Technical or engineered material use); **PREP (Preparation)**;  
 USES (Uses)

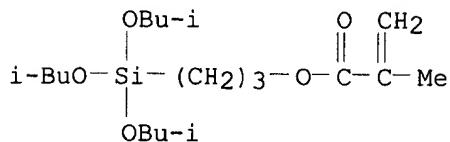
(aq. silylated polymer **curable** compns. with tin catalysts)

RN 189458-72-8 HCPLUS

CN 2-Propenoic acid, 2-methyl-, 3-[tris(2-methylpropoxy)silyl]propyl ester,

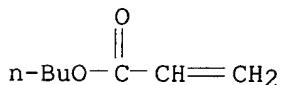
polymer with butyl 2-propenoate and ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 189458-71-7  
CMF C19 H38 O5 Si

(3)

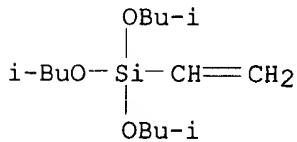
CM 2

CRN 141-32-2  
CMF C7 H12 O2

CM 3

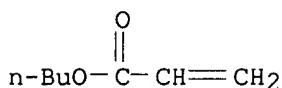
CRN 108-05-4  
CMF C4 H6 O2AcO-CH=CH<sub>2</sub>RN 189458-74-0 HCPLUS  
CN 2-Propenoic acid, butyl ester, polymer with ethenyl acetate and ethenyltris(2-methylpropoxy)silane (9CI) (CA INDEX NAME)

CM 1

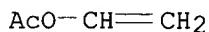
CRN 18545-02-3  
CMF C14 H30 O3 Si

CM 2

CRN 141-32-2  
CMF C7 H12 O2

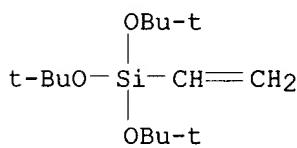


CM 3

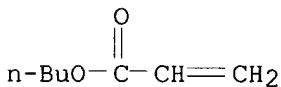
CRN 108-05-4  
CMF C4 H6 O2

RN 189458-75-1 HCPLUS  
 CN 2-Propenoic acid, butyl ester, polymer with ethenyl acetate and  
 tris(1,1-dimethylethoxy)ethenylsilane (9CI) (CA INDEX NAME)

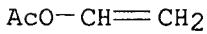
CM 1

CRN 5356-88-7  
CMF C14 H30 O3 Si

CM 2

CRN 141-32-2  
CMF C7 H12 O2

CM 3

CRN 108-05-4  
CMF C4 H6 O2

L30 ANSWER 10 OF 25 HCPLUS COPYRIGHT 2002 ACS  
 AN 1998:666059 HCPLUS  
 DN 129:316636  
 TI Reactive polymers incorporating silyl enol ether groups. Part 3.

Incorporation of .alpha.,.beta.-bis(siloxy)vinylene units into the backbone of vinyl polymers by free-radical (co)polymerization of 2,3-bis(trialkylsiloxy)butadienes

AU Mayne, Veronique; Penelle, Jaques

CS Lab. Cinetique Macromolecules, Dep. Chimie, Univ. Catholique Louvain, Louvain, B-1348, Belg.

SO Macromolecular Chemistry and Physics (1998), 199(10), 2173-2178  
CODEN: MCHPES; ISSN: 1022-1352

PB Huethig & Wepf Verlag

DT Journal

LA English

CC 35-4 (Chemistry of Synthetic High Polymers)

AB 2,3-Bis(trimethylsiloxy)butadiene and 2,3-bis(tert-butyldimethylsiloxy)butadiene were homopolymd. and copolymd. with styrene (St) and Me methacrylate (MMA) under free-radical conditions. Comparison of initial rates and mol. wts. with polymns. conducted under identical exptl. conditions on monosubstituted analogs, 2-trimethylsiloxybutadiene and 2-(tert-butyldimethylsiloxy)butadiene demonstrated that the second substituent does not decrease the polymerizability significantly despite the addnl. steric hindrance introduced in the monomer. Extensive <sup>1</sup>H and <sup>13</sup>C NMR characterization of the polymers demonstrated that the main incorporation mode is of the 1,4-type, allowing >95% of the butadienyl subunit to be incorporated in the main chain as an .alpha.,.beta.-bis(trialkyl-siloxy)vinylene functional group. Monomer reactivity ratios r<sub>1</sub> and r<sub>2</sub> at 60.degree. were detd. from copolymer compn. curves obtained at low conversions and are compared with values obtained for other 1,2-butadienyl systems.

ST alkylsiloxybutadiene monomer prepn polymn vinyl compd; siloxyvinylene unit styrene methacrylate polymer; methylsiloxybutadiene styrene methacrylate polymn reactivity ratio; butylmethylsiloxybutadiene styrene methacrylate polymn reactivity ratio; styrene methacrylate alkylsiloxybutadiene polymn reactivity ratio

IT Reactivity ratio in polymerization  
(kinetics and reactivity ratios of bis(trialkylsiloxy)butadiene monomers with styrene or Me methacrylate)

IT 80-62-6, Methyl methacrylate 100-42-5, Styrene, reactions  
RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)  
(kinetics and reactivity ratios of bis(trialkylsiloxy)butadiene monomers with)

IT 6651-43-0 38053-91-7 80738-05-2  
RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)  
(kinetics and reactivity ratios of bis(trialkylsiloxy)butadiene monomers with styrene or Me methacrylate)

IT 214832-45-8P **214832-46-9P** 214832-47-0P **214832-48-1P**  
214832-49-2P  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(kinetics and reactivity ratios of bis(trialkylsiloxy)butadiene monomers with styrene or Me methacrylate)

IT 31411-71-9P 110719-34-1P  
RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)  
(monomer; prepn. and polymn. of bis(trialkylsiloxy)butadiene monomers)

IT 431-03-8, 2,3-Butanedione 27607-77-8, Trimethylsilyl triflate 69739-34-0, tert-Butyldimethylsilyl triflate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. and polymn. of bis(trialkylsiloxy)butadiene monomers)

IT 214832-46-9P 214832-48-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(kinetics and reactivity ratios of bis(trialkylsiloxy)butadiene monomers with styrene or Me methacrylate)

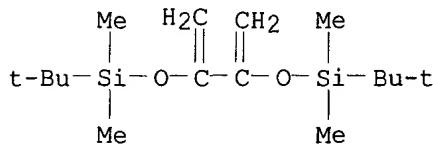
RN 214832-46-9 HCPLUS

CN 4,7-Dioxa-3,8-disiladecane, 2,2,3,3,8,8,9,9-octamethyl-5,6-bis(methylene)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 110719-34-1

CMF C16 H34 O2 Si2



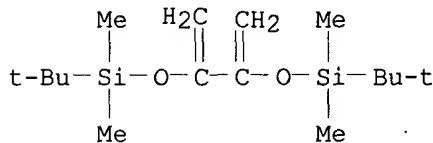
RN 214832-48-1 HCPLUS

CN 4,7-Dioxa-3,8-disiladecane, 2,2,3,3,8,8,9,9-octamethyl-5,6-bis(methylene)-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 110719-34-1

CMF C16 H34 O2 Si2



CM 2

CRN 100-42-5

CMF C8 H8

 $\text{H}_2\text{C}=\text{CH}-\text{Ph}$ 

L30 ANSWER 11 OF 25 HCPLUS COPYRIGHT 2002 ACS

AN 1997:701875 HCPLUS

DN 127:332873

TI Antifouling coating composition based on rosin blends

IN Itoh, Masayasu; Fukuda, Shigeo; Kawakami, Yoshihisa; Matsubara, Yoshihiro; Kawamura, Yasushi; Masuoka, Shigeru; Honda, Yoshihiro

PA NOF Corporation, Japan

SO Eur. Pat. Appl., 29 pp.

CODEN: EPXXDW

DT Patent

LA English  
 IC ICM C09D005-16  
 CC 42-10 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 5, 60

## FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 802243	A2	19971022	EP 1997-106277	19970416
	EP 802243	A3	19971229		
	EP 802243	B1	20010627		
	R: BE, DE, DK, GB, GR, IT, NL, SE, FI				
	NO 9701727	A	19971020	NO 1997-1727	19970415
	US 5795374	A	19980818	US 1997-839702	19970415
	US 5795374	C1	20020305		
	JP 10030071	A2	19980203	JP 1997-98856	19970416
	CN 1167797	A	19971217	CN 1997-110757	19970417
	CN 1086406	B	20020619		
PRAI	JP 1996-95028	A	19960417		
AB	The title coating compn. comprises a rosin compd., a polymer contg. organosilyl ester groups, and an antifoulant. This rosin-based coating compn. gives a coating film which forms no residue layer on the surface over long-term immersion, is free from phys. defects such as cracks and peeling and capable of maintaining a sufficiently high rate of film erosion, has suitability for recoating, and prevents marine-organism attachment over the out-fitting period. An antifoulant compn. contained tall rosin 10, polymer of Bu methacrylate, 2-ethylhexyl acrylate, .alpha.-methylstyrene, and CH <sub>2</sub> :CHCO <sub>2</sub> SiMe <sub>2</sub> (tert-C <sub>4</sub> H <sub>9</sub> ) 20, cuprous oxide 5, 4,5-dichloro-2-n-octylisothiazolin-3-one 10, 2,4,6-trichlorophenylmaleimide 3, and 3-iodo-2-propynylbutyl carbamate 5, red iron oxide 3, antisag agent 2, bentone SD-2 1, and solvent 41 parts.				
ST	antifouling coating rosin blend; tall rosin blend acrylic polymer; organosilyl ester vinyl polymer blend rosin; cuprous oxide antifouling polymer blend coating; isothiazolinone deriv antifouling polymer blend coating; iodopropynylbutyl carbamate antifouling polymer blend coating				
IT	Coating materials (antifouling; coating compn. based on rosin blends and having good long term antifouling properties and recoatability)				
IT	Rosin Tall oil rosin RL: BUU (Biological use, unclassified); POF (Polymer in formulation); PRP (Properties); BIOL (Biological study); USES (Uses) (blend with polymer contg. organosilyl ester; coating compn. based on rosin blends and having good long term antifouling properties and recoatability)				
IT	Rosin RL: BUU (Biological use, unclassified); POF (Polymer in formulation); PRP (Properties); BIOL (Biological study); USES (Uses) (hydrogenated, blend with polymer contg. organosilyl ester; coating compn. based on rosin blends and having good long term antifouling properties and recoatability)				
IT	Rosin RL: BUU (Biological use, unclassified); POF (Polymer in formulation); PRP (Properties); BIOL (Biological study); USES (Uses) (polymd., blend with polymer contg. organosilyl ester; coating compn. based on rosin blends and having good long term antifouling properties and recoatability)				
IT	198013-63-7P	198013-64-8P	198013-65-9P	<b>198013-66-0P</b>	
	198013-67-1P	<b>198013-68-2P</b>	<b>198013-70-6P</b>	198013-71-7P	
	198013-73-9P	<b>198013-74-0P</b>	198013-75-1P	198013-76-2P	
	198013-77-3P	<b>198013-78-4P</b>	198013-79-5P	<b>198013-80-8P</b>	

RL: BUU (Biological use, unclassified); **IMF (Industrial manufacture)**; POF (Polymer in formulation); PRP (Properties); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)  
 (blend with rosin; coating compn. based on rosin blends and having good long term antifouling properties and recoatability)

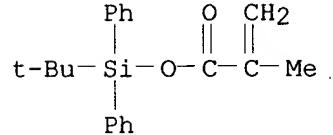
IT 719-96-0, N-(Fluorodichloromethylthio)phthalimide 971-66-4 1111-67-7,  
 Copper thiocyanate 1317-39-1, Cuprous oxide, uses 1897-45-6,  
 2,4,5,6-Tetrachloroisophthalonitrile 11101-28-3 13108-52-6,  
 2,3,5,6-Tetrachloro-4-(methylsulfonyl)pyridine 13167-25-4,  
 N-(2,4,6-Trichlorophenyl)maleimide 13463-41-7, 2-Pyridinethiol-1-oxide  
 zinc salt 21564-17-0, 2-(Thiocyanomethylthio)benzothiazole 43100-11-4,  
 Zinc dimethylthiocarbamate 55406-53-6, 3-Iodo-2-propynylbutyl carbamate  
 55986-03-3 64359-81-5 154592-20-8, 2-Pyridinethiol-1-oxide copper salt  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (coating compn. based on rosin blends and having good long  
 term antifouling properties and recoatability)

IT 198013-66-0P 198013-68-2P 198013-70-6P  
 198013-74-0P 198013-78-4P 198013-80-8P  
 RL: BUU (Biological use, unclassified); **IMF (Industrial manufacture)**; POF (Polymer in formulation); PRP (Properties); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)  
 (blend with rosin; coating compn. based on rosin blends and having good long term antifouling properties and recoatability)

RN 198013-66-0 HCAPLUS  
 CN 2-Butenedioic acid (2Z)-, dimethyl ester, polymer with butyl 2-propenoate, (1,1-dimethylethyl)diphenylsilyl 2-methyl-2-propenoate, ethenyl acetate, ethenylbenzene, ethenyl neononanoate and 2-methoxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

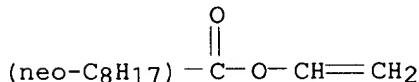
CM 1

CRN 158619-42-2  
 CMF C20 H24 O2 Si



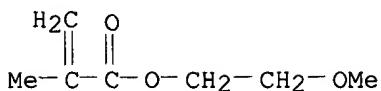
CM 2

CRN 54423-67-5  
 CMF C11 H20 O2  
 CCI IDS



CM 3

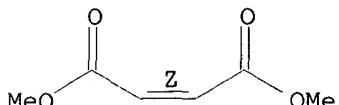
CRN 6976-93-8  
 CMF C7 H12 O3



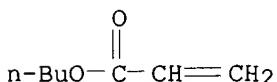
CM 4

CRN 624-48-6  
CMF C6 H8 O4

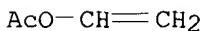
Double bond geometry as shown.



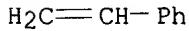
CM 5

CRN 141-32-2  
CMF C7 H12 O2

CM 6

CRN 108-05-4  
CMF C4 H6 O2

CM 7

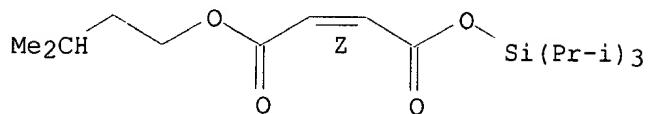
CRN 100-42-5  
CMF C8 H8

RN 198013-68-2 HCPLUS  
 CN 2-Butenedioic acid (2Z)-, dimethyl ester, polymer with ethenyl acetate,  
 ethenyl tert-decanoate, ethenyl propanoate, 3-methylbutyl  
 tris(1-methylethyl)silyl (2Z)-2-butenedioate and (1-methylethenyl)benzene  
 (9CI) (CA INDEX NAME)

CM 1

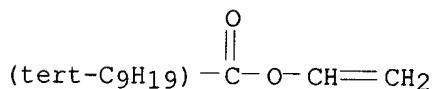
CRN 146268-09-9  
 CMF C18 H34 O4 Si

Double bond geometry as shown.



CM 2

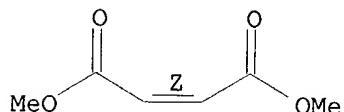
CRN 26544-09-2  
 CMF C12 H22 O2  
 CCI IDS



CM 3

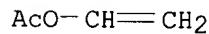
CRN 624-48-6  
 CMF C6 H8 O4

Double bond geometry as shown.



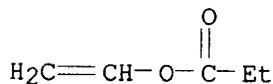
CM 4

CRN 108-05-4  
 CMF C4 H6 O2

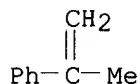


CM 5

CRN 105-38-4  
 CMF C5 H8 O2



CM 6

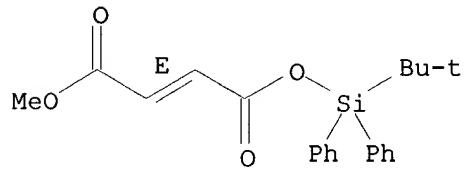
CRN 98-83-9  
CMF C9 H10

RN 198013-70-6 HCPLUS  
 CN 2-Butenedioic acid (2E)-, (1,1-dimethylethyl)diphenylsilyl methyl ester,  
 polymer with ethenyl benzoate, 2-methoxyethyl 2-propenoate and methyl  
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

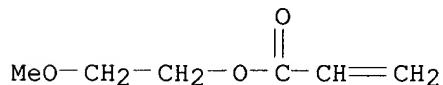
CM 1

CRN 198013-69-3  
CMF C21 H24 O4 Si

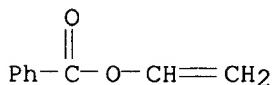
Double bond geometry as shown.



CM 2

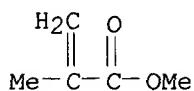
CRN 3121-61-7  
CMF C6 H10 O3

CM 3

CRN 769-78-8  
CMF C9 H8 O2

CM 4

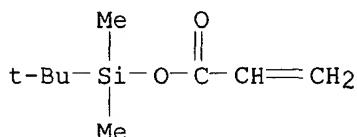
CRN 80-62-6  
 CMF C5 H8 O2



RN 198013-74-0 HCPLUS  
 CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with  
 (1,1-dimethylethyl)dimethylsilyl 2-propenoate, ethenyl acetate,  
 ethenylbenzene and (1-methylethenyl)benzene (9CI) (CA INDEX NAME)

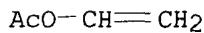
CM 1

CRN 98983-18-7  
 CMF C9 H18 O2 Si



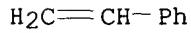
CM 2

CRN 108-05-4  
 CMF C4 H6 O2



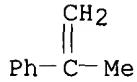
CM 3

CRN 100-42-5  
 CMF C8 H8

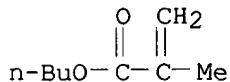


CM 4

CRN 98-83-9  
 CMF C9 H10



CM 5

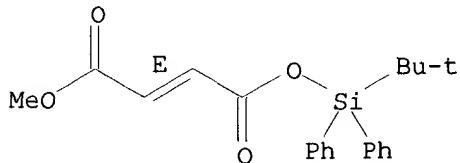
CRN 97-88-1  
CMF C8 H14 O2

RN 198013-78-4 HCAPLUS  
 CN 2-Butenedioic acid (2E)-, (1,1-dimethylethyl)diphenylsilyl methyl ester,  
 polymer with butyl 2-propenoate, (1,1-dimethylethyl)diphenylsilyl  
 2-methyl-2-propenoate and ethenyl propanoate (9CI) (CA INDEX NAME)

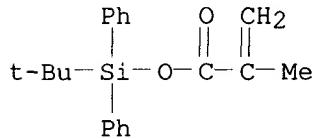
CM 1

CRN 198013-69-3  
CMF C21 H24 O4 Si

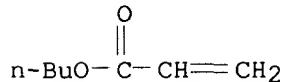
Double bond geometry as shown.



CM 2

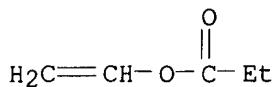
CRN 158619-42-2  
CMF C20 H24 O2 Si

CM 3

CRN 141-32-2  
CMF C7 H12 O2

CM 4

CRN 105-38-4  
 CMF C5 H8 O2

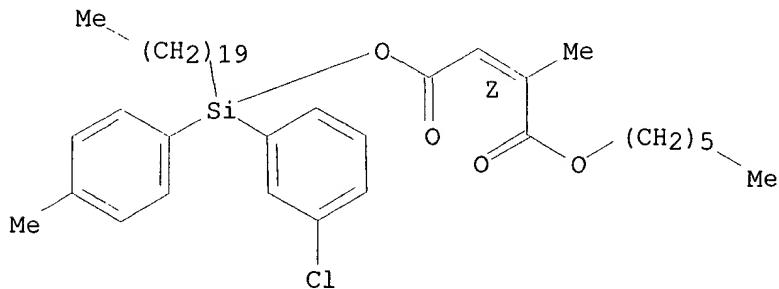


RN 198013-80-8 HCPLUS  
 CN 2-Butenedioic acid, 2-methyl-, 4-[(3-chlorophenyl)eicosyl(4-methylphenyl)silyl] 1-hexyl ester, (2Z)-, polymer with ethenylbenzene, ethenyl neononanoate, 2-methoxyethyl 2-propenoate, 3-methylbutyl tris(1-methylethyl)silyl (2Z)-2-butenedioate, 4-pentyl 1-(tributylsilyl)methylenebutanedioate and tributylsilyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

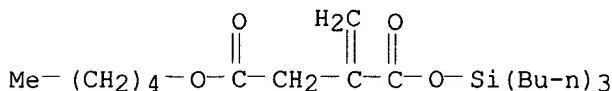
CRN 198013-72-8  
 CMF C44 H69 Cl O4 Si

Double bond geometry as shown.



CM 2

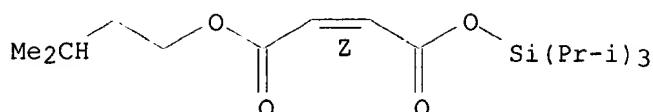
CRN 184432-55-1  
 CMF C22 H42 O4 Si



CM 3

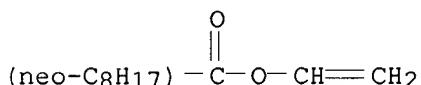
CRN 146268-09-9  
 CMF C18 H34 O4 Si

Double bond geometry as shown.



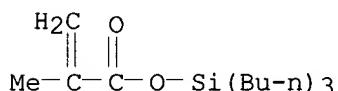
CM 4

CRN 54423-67-5  
 CMF C11 H20 O2  
 CCI IDS



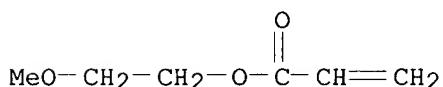
CM 5

CRN 22414-62-6  
 CMF C16 H32 O2 Si



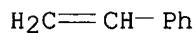
CM 6

CRN 3121-61-7  
 CMF C6 H10 O3



CM 7

CRN 100-42-5  
 CMF C8 H8



L30 ANSWER 12 OF 25 HCPLUS COPYRIGHT 2002 ACS  
 AN 1997:568231 HCPLUS  
 DN 127:222028  
 TI Aqueous silyl-group-containing polymer **curable compositions**

KATHLEEN FULLER EIC 1700/LAW LIBRARY 308-4290

IN Chen, Ming J.; Osterholtz, Frederick D.

PA OSI Specialties, Inc., USA

SO PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C08L083-04

CC 42-10 (Coatings, Inks, and Related Products)

FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9730120	A1	19970821	WO 1996-US15733	19961002
	W: BR, CA, JP, KR, SG				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2217725	AA	19970821	CA 1996-2217725	19961002
	EP 820487	A1	19980128	EP 1996-932359	19961002
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	BR 9604952	A	19980609	BR 1996-4952	19961002
	JP 11504676	T2	19990427	JP 1997-529320	19961002
PRAI	US 1996-601643	A	19960214		
	WO 1996-US15733	W	19961002		
AB	<b>Curable compns.</b> , useful for coatings, comprise a storage-stable, water-dispersible, <b>curable</b> polymer contg. a sterically hindered alkoxyLATED silane group at 0.1 to 75 wt. percent of the total <b>compn.</b> ; a water dispersible or water sol., hydrolytically stable organometallic catalyst at 0.1 to 10 wt. percent of the total <b>compn.</b> ; and water at 99.8 to 24.9 wt. percent of the total <b>compn.</b> . The coatings have improved properties including solvent resistance, adhesion, hardness, abrasion resistance and mar resistance. Particular catalysts for use herein include dihydroxybis[2-hydroxypropanato (2--O1,O2) titanate, mixed titanium ortho ester complexes, acetylacetone chelates, bis(ethyl-3-oxobutanolato-O1,O3)bis(2-propanolato)titanium, ab alkanolamine complex of titanium, and mercapto alc., mercaptide or sulfide forms of diorganotins having either a SnS or Sn:S bond. A typical polymer was manufd. by radical, emulsion-polymn. of vinyl acetate, Bu acrylate, and 3-methacryloyloxypropyltriisopropoxysilane in an 86.3:9.8:3.9 mol ratio.				
ST	storage stable waterborne silylated polymer coating; acrylate copolymer waterborne coating; vinyl acetate copolymer waterborne coating; methacryloyloxypropyltriisopropoxysilane copolymer waterborne coating; mercaptotin crosslinking catalyst silyl polymer coating; organotin crosslinking catalyst silyl polymer coating; titanate crosslinking catalyst silyl polymer coating; organometallic crosslinking catalyst silyl polymer coating; solvent resistant silyl contg polymer coating; abrasion resistant silyl contg polymer coating; sterically hindered alkoxySilyl contg polymer coating				
IT	Organometallic compounds RL: CAT (Catalyst use); USES (Uses) (crosslinking catalyst; storage-stable aq. sterically hindered silyl-group-contg. vinyl acrylic polymer <b>curable</b> <b>comps.</b> for coatings)				
IT	Crosslinking catalysts (hydrolytically stable organometallic compds.; storage-stable aq. sterically hindered silyl-group-contg. vinyl acrylic polymer <b>curable</b> <b>comps.</b> for coatings)				
IT	Coating materials (water-thinned; storage-stable aq. sterically hindered silyl-group-contg. vinyl acrylic polymer <b>curable</b> <b>comps.</b> for coatings)				

IT 1185-81-5, Fomrez UL-32 7440-31-5D, Tin, organo derivs., uses  
 31685-54-8, Fomrez UL 1 65104-06-5, Tyzor LA 74913-27-2, Fomrez UL-22  
 109768-37-8, Tyzor 131 189767-64-4, PE1013  
 RL: CAT (Catalyst use); USES (Uses)  
 (crosslinking catalyst; storage-stable aq. sterically hindered  
 silyl-group-contg. vinyl acrylic polymer **curable compns.** for coatings)

IT 189458-70-6P 189458-72-8P 189458-73-9P 189458-74-0P  
**189458-75-1P**  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM  
 (Technical or engineered material use); PREP (Preparation); USES  
 (Uses)  
 (storage-stable aq. sterically hindered silyl-group-contg. vinyl  
 acrylic polymer **curable compns.** for coatings)

IT 189458-72-8P 189458-74-0P 189458-75-1P  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM  
 (Technical or engineered material use); PREP (Preparation); USES  
 (Uses)  
 (storage-stable aq. sterically hindered silyl-group-contg. vinyl  
 acrylic polymer **curable compns.** for coatings)

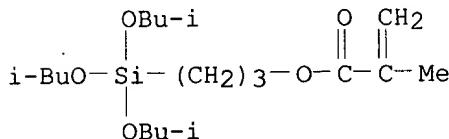
RN 189458-72-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-[tris(2-methylpropoxy)silyl]propyl ester,  
 polymer with butyl 2-propenoate and ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 189458-71-7

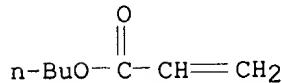
CMF C19 H38 O5 Si



CM 2

CRN 141-32-2

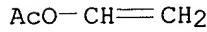
CMF C7 H12 O2



CM 3

CRN 108-05-4

CMF C4 H6 O2



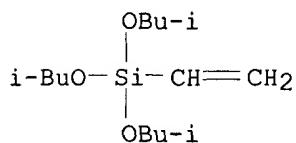
RN 189458-74-0 HCAPLUS

KATHLEEN FULLER EIC 1700/LAW LIBRARY 308-4290

CN 2-Propenoic acid, butyl ester, polymer with ethenyl acetate and  
ethenyltris(2-methylpropoxy)silane (9CI) (CA INDEX NAME)

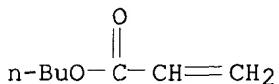
CM 1

CRN 18545-02-3  
CMF C14 H30 O3 Si



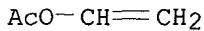
CM 2

CRN 141-32-2  
CMF C7 H12 O2



CM 3

CRN 108-05-4  
CMF C4 H6 O2

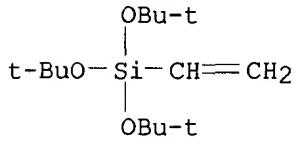


RN 189458-75-1 HCPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenyl acetate and  
tris(1,1-dimethylethoxy)ethenylsilane (9CI) (CA INDEX NAME)

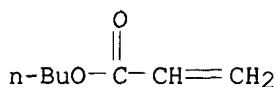
CM 1

CRN 5356-88-7  
CMF C14 H30 O3 Si



CM 2

CRN 141-32-2  
CMF C7 H12 O2



CM 3

CRN 108-05-4  
CMF C4 H6 O2AcO-CH=CH<sub>2</sub>

L30 ANSWER 13 OF 25 HCPLUS COPYRIGHT 2002 ACS  
 AN 1997:543585 HCPLUS  
 DN 127:136787  
 TI Use of vinyl ether copolymer adhesives  
 IN Kroener, Hubertus; Gerst, Matthias; Friedrich, Holger; Barwich, Juergen;  
 Heider, Marc  
 PA BASF A.-G., Germany  
 SO Ger. Offen., 8 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 IC ICM C08F230-08  
 ICS C08F216-12; C09J129-10; C09J143-04; C09J183-06; C09J007-02;  
 B32B007-12; G09F003-10  
 ICA C07F007-18  
 CC 38-3 (Plastics Fabrication and Uses)  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 19700063	A1	19970717	DE 1997-19700063	19970103
PRAI DE 1996-19600856		19960112		
AB Copolymers contg. hydrolyzable SiR <sub>1x</sub> (OR <sub>2</sub> ) <sub>3-x</sub> groups (R <sub>1</sub> , R <sub>2</sub> = C <sub>1-20</sub> alkyl, C <sub>5-30</sub> aryl, C <sub>5-30</sub> alkaryl, aralkyl; x = 0-2) and derived from 70-100% vinyl ethers and 0-30% other monomers are used as moisture-curable adhesives. Thus, 300 g iso-BuOCH:CH <sub>2</sub> and 8.3 g CH <sub>2</sub> :CHOCH <sub>2</sub> CH <sub>2</sub> OCH <sub>2</sub> CH <sub>2</sub> Si(OEt) <sub>3</sub> were copolymd. in naphtha at -27.degree. with BF <sub>3</sub> .OEt <sub>2</sub> as initiator to give a polymer with wt.-av. mol. wt 112,000 and no.-av. mol. wt. 17,800, which showed adhesive strength 7.2 N/15 mm after 7 days when used to bond a polypropylene film to a polyethylene film.				
ST vinyl ether copolymer adhesive; silylated polyvinyl ether moisture curable				
IT Adhesives (vinyl ether copolymer adhesives)				
IT Labels (vinyl ether copolymer adhesives for)				
IT 9002-88-4, Polyethylene 9003-07-0, Polypropylene RL: MSC (Miscellaneous)				
IT 193157-66-3P, Isobutyl vinyl ether-2-[2-(triethoxysilyl)ethoxy]ethyl vinyl ether copolymer 193157-69-6P, Isobutyl vinyl ether-4-[3-(triethoxysilyl)propoxy]butyl vinyl ether copolymer 193157-70-9P, Isobutyl vinyl ether-4-[2-				

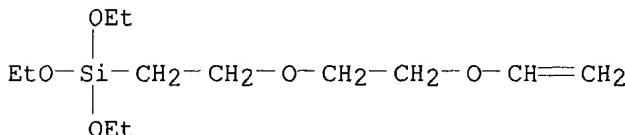
(triethoxysilyl)ethoxy]butyl vinyl ether copolymer 193157-72-1P,  
 Isobutyl vinyl ether-2-[2-[2-(triethoxysilyl)ethoxy]ethoxy]ethyl vinyl  
 ether copolymer 193157-74-3P, Isobutyl vinyl ether-2-[2-  
 (trimethoxysilyl)ethoxy]ethyl vinyl ether copolymer 193157-76-5P,  
 Isobutyl vinyl ether-4-[3-(trimethoxysilyl)propoxy]butyl vinyl ether  
 copolymer 193157-78-7P, Isobutyl vinyl ether-[4-[2-  
 (trimethoxysilyl)ethoxy]methyl]cyclohexyl)methyl vinyl ether copolymer  
 193157-80-1P, Methyl vinyl ether-2-[2-[2-(trimethoxysilyl)ethoxy]ethoxy]et-  
 hyl vinyl ether copolymer  
 RL: **IMF (Industrial manufacture)**; PRP (Properties); TEM  
 (Technical or engineered material use); **PREP (Preparation)**; USES  
 (Uses)  
 (vinyl ether copolymer adhesives)

IT 193157-66-3P, Isobutyl vinyl ether-2-[2-  
 (triethoxysilyl)ethoxy]ethyl vinyl ether copolymer 193157-69-6P,  
 Isobutyl vinyl ether-4-[3-(triethoxysilyl)propoxy]butyl vinyl ether  
 copolymer 193157-70-9P, Isobutyl vinyl ether-4-[2-  
 (triethoxysilyl)ethoxy]butyl vinyl ether copolymer 193157-72-1P,  
 Isobutyl vinyl ether-2-[2-[2-(triethoxysilyl)ethoxy]ethoxy]ethyl vinyl  
 ether copolymer  
 RL: **IMF (Industrial manufacture)**; PRP (Properties); TEM  
 (Technical or engineered material use); **PREP (Preparation)**; USES  
 (Uses)  
 (vinyl ether copolymer adhesives)

RN 193157-66-3 HCPLUS  
 CN 3,7,10-Trioxa-4-siladodec-11-ene, 4,4-diethoxy-, polymer with  
 1-(ethenyl)oxy-2-methylpropane (9CI) (CA INDEX NAME)

CM 1

CRN 193094-11-0  
 CMF C12 H26 O5 Si



CM 2

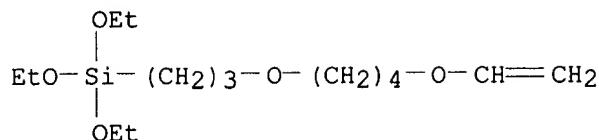
CRN 109-53-5  
 CMF C6 H12 O

i-BuO-CH=CH<sub>2</sub>

RN 193157-69-6 HCPLUS  
 CN 3,8,13-Trioxa-4-silapentadec-14-ene, 4,4-diethoxy-, polymer with  
 1-(ethenyl)oxy-2-methylpropane (9CI) (CA INDEX NAME)

CM 1

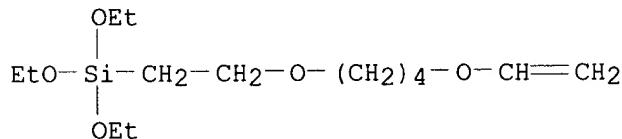
CRN 193157-68-5  
 CMF C15 H32 O5 Si



CM 2

CRN 109-53-5  
CMF C6 H12 Oi-BuO-CH=CH<sub>2</sub>RN 193157-70-9 HCPLUS  
CN 3,7,12-Trioxa-4-silatetradec-13-ene, 4,4-diethoxy-, polymer with  
1-(ethenyloxy)-2-methylpropane (9CI) (CA INDEX NAME)

CM 1

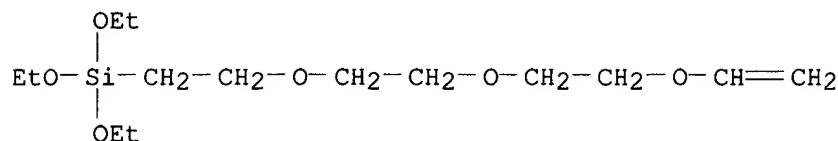
CRN 193094-04-1  
CMF C14 H30 O5 Si

CM 2

CRN 109-53-5  
CMF C6 H12 Oi-BuO-CH=CH<sub>2</sub>RN 193157-72-1 HCPLUS  
CN 3,7,10,13-Tetraoxa-4-silapentadec-14-ene, 4,4-diethoxy-, polymer with  
1-(ethenyloxy)-2-methylpropane (9CI) (CA INDEX NAME)

CM 1

CRN 193157-71-0  
CMF C14 H30 O6 Si



CM 2

CRN 109-53-5  
CMF C6 H12 Oi-BuO--CH=CH<sub>2</sub>

L30 ANSWER 14 OF 25 HCPLUS COPYRIGHT 2002 ACS  
 AN 1997:353978 HCPLUS  
 DN 126:331670  
 TI Aqueous curable silane-polymer compositions  
 IN Chen, Ming J.; Osterholtz, Frederick D.; Pohl, Eric R.; Chaves, Antonio; Ramadatt, Phil E.  
 PA Osi Specialties, Inc., USA  
 SO PCT Int. Appl., 60 pp.

DT Patent

LA English

IC ICM C08L083-04  
ICS C08L083-06

CC 42-7 (Coatings, Inks, and Related Products)

FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9712940	A1	19970410	WO 1996-US16064	19961007
	W: BR, CA, JP, KR, SG				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5686523	A	19971111	US 1995-540142	19951006
	EP 853645	A1	19980722	EP 1996-933251	19961007
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	BR 9608437	A	19990309	BR 1996-8437	19961007
	JP 2000512662	T2	20000926	JP 1997-514515	19961007
PRAI	US 1995-540142	A	19951006		
	US 1995-452163	B2	19950526		
	WO 1996-US16064	W	19961007		

OS MARPAT 126:331670

AB The present invention provides stable comprising: (A) a water insol. or slightly sol. alkoxy silane; (B) emulsifier, (C) water; and (D) water dispersible or emulsified polymer contg. an alkoxy silane functional group. Also provided are two part systems such that an alkoxy silane emulsion comprising components (A)-(C) are combined and the component (D) may be added upon use of components (A) to (C). Moreover, addnl. components such as catalysts and pH buffers may be added. The compns. of the present invention are stable for at least about three to twelve months and are useful in manuf. of coatings. A typical alkoxy silane group-contg. polymer was manufd. by polymn. of Bu acrylate (I) 119.5, Me methacrylate (II) 122.2, and methacrylic acid (III) 3.3 g in water in the presence of

FeSO<sub>4</sub>, (NH<sub>4</sub>)<sub>2</sub>S<sub>2</sub>O<sub>8</sub>, Na formaldehyde sulfoxylate (IV), and surfactants, and polymn. of I 98.1, II 100.4, III 2.7, and 3-methacryloyloxypropyltrimethoxysilane 13.8 g in the resulting soln. in the presence of addn. IV and tert-Bu hydroperoxide.

ST waterborne **curable** alkoxy silane acrylic polymer coating; methacryloyloxy silane copolymer waterborne **curable** coating; acrylate copolymer waterborne **curable** coating; storage stable **curable** waterborne coating compn; methacrylate copolymer waterborne **curable** coating

IT Silanes  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(alkoxy; storage-stable aq. **curable** compns. contg.  
alkoxysilanes and polymers having alkoxy silane groups for coatings)

IT Crosslinking agents  
(storage-stable aq. **curable** compns. contg.  
alkoxysilanes and polymers having alkoxy silane groups for coatings)

IT Coating materials  
(water-thinned; storage-stable aq. **curable** compns.  
contg. alkoxy silanes and polymers having alkoxy silane groups for coatings)

IT 189450-95-1P 189450-96-2P 189450-97-3P 189450-98-4P 189450-99-5P  
189451-00-1P 189451-01-2P 189451-02-3P 189451-03-4P 189451-04-5P  
**189451-05-6P** 189451-06-7P 189451-07-8P 189451-08-9P  
189451-09-0P **189451-10-3P** **189451-11-4P** 189451-12-5P  
RL: IMF (Industrial manufacture); PRP (Properties); TEM  
(Technical or engineered material use); PREP (Preparation); USES  
(Uses)  
(cured coating; storage-stable aq. **curable** compns. contg. alkoxy silanes and polymers having alkoxy silane groups for coatings)

IT 74242-09-4P, Butyl acrylate-3-methacryloyloxypropyltrimethoxysilane-vinyl acetate copolymer 83051-95-0P  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM  
(Technical or engineered material use); PREP (Preparation); USES (Uses)  
(storage-stable aq. **curable** compns. contg.  
alkoxysilanes and polymers having alkoxy silane groups for coatings)

IT 780-69-8, Phenyltriethoxysilane 2761-24-2, Amyltriethoxysilane 2943-75-1, Octyltriethoxysilane 5621-09-0, Dimethyldipropoxysilane 10217-34-2, .beta.- (3,4-Epoxy cyclohexyl)ethyltriethoxysilane 14814-09-6, 3-Mercaptopropyltriethoxysilane 17985-18-1, Diethyldipropoxysilane 18044-47-8, Ethyltriisopropoxysilane 18056-94-5, Diphenyldipropoxysilane 18132-64-4, Dimethyldiisobutoxysilane 18442-72-3, Methyltriisobutoxysilane 18536-91-9, Dodecyltriethoxysilane 18558-10-6, Amyltributoxysilane 21142-29-0 56541-79-8, Butyltributoxysilane 82194-46-5, Tris(3-triethoxysilylpropyl) isocyanurate 189450-93-9, .beta.- (3,4-Epoxy cyclohexyl)ethyltriisobutoxysilane 189450-94-0, 3-Glycidyloxypropyltriisobutoxysilane 189451-13-6, Propyltriisobutoxysilane 189451-14-7, Dibutyltriisopropoxysilane  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(storage-stable aq. **curable** compns. contg.  
alkoxysilanes and polymers having alkoxy silane groups for coatings)

IT **189451-05-6P** **189451-10-3P** **189451-11-4P**  
RL: IMF (Industrial manufacture); PRP (Properties); TEM  
(Technical or engineered material use); PREP (Preparation); USES  
(Uses)  
(cured coating; storage-stable aq. **curable** compns. contg. alkoxy silanes and polymers having alkoxy silane groups for coatings)

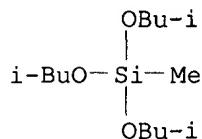
RN 189451-05-6 HCAPLUS

2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, polymer with butyl 2-propenoate, ethenyl acetate and methyltris(2-methylpropoxy)silane (9CI) (CA INDEX NAME)

CM 1

CRN 18442-72-3

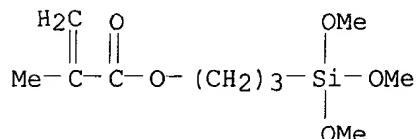
CMF C13 H30 O3 Si



CM 2

CRN 2530-85-0

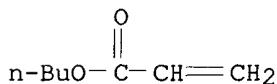
CMF C10 H20 O5 Si



CM 3

CRN 141-32-2

CMF C7 H12.O2



CM 4

CRN 108-05-4

CMF C4 H6 O2

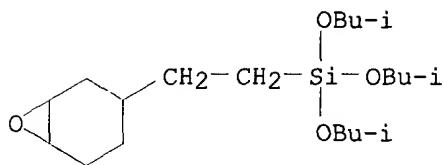
$$\text{AcO}-\text{CH}=\text{CH}_2$$

RN 189451-10-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, polymer with butyl 2-propenoate, ethenyl acetate and tris(2-methylpropoxy)[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

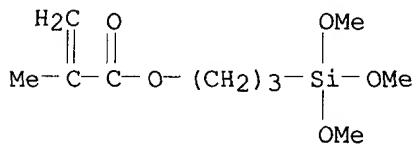
CM 1

CRN 189450-93-9  
 CMF C20 H40 O4 Si



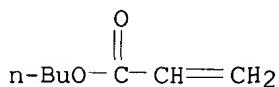
CM 2

CRN 2530-85-0  
 CMF C10 H20 O5 Si



CM 3

CRN 141-32-2  
 CMF C7 H12 O2



CM 4

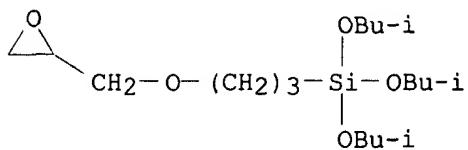
CRN 108-05-4  
 CMF C4 H6 O2

AcO-CH=CH<sub>2</sub>

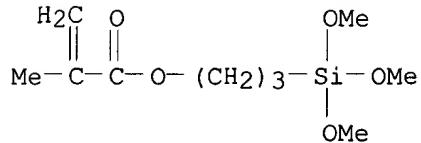
RN 189451-11-4 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, polymer with butyl 2-propenoate, ethenyl acetate and tris(2-methylpropoxy)[3-(oxiranylmethoxy)propyl]silane (9CI) (CA INDEX NAME)

CM 1

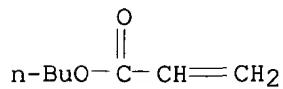
CRN 189450-94-0  
 CMF C18 H38 O5 Si



CM 2

CRN 2530-85-0  
CMF C10 H20 O5 Si

CM 3

CRN 141-32-2  
CMF C7 H12 O2

CM 4

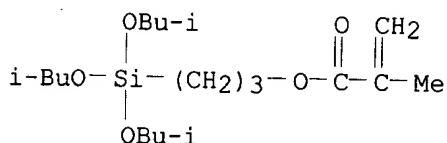
CRN 108-05-4  
CMF C4 H6 O2AcO-CH=CH<sub>2</sub>

L30 ANSWER 15 OF 25 HCPLUS COPYRIGHT 2002 ACS  
 AN 1997:276783 HCPLUS  
 DN 126:344232  
 TI Aqueous silylated polymer **curable compositions** with  
     good storage stability  
 IN Chen, Ming J.; Osterholtz, Frederick D.  
 PA Osi Specialties, Inc., USA  
 SO U.S., 12 pp.  
     CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM C08L083-04  
 NCL 524547000  
 CC 37-6 (Plastics Manufacture and Processing)  
     Section cross-reference(s): 42  
 FAN.CNT 6

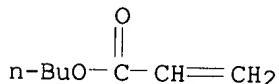
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5621038 US 5686523 TW 406100 US 5827922 US 6069200	A A B A A	19970415 19971111 20000921 19981027 20000530	US 1995-452163 US 1995-540142 TW 1996-85112712 US 1997-808113 US 1997-935003	19950526 19951006 19961017 19970228 19970922
PRAI	US 1995-452163 US 1995-549194 US 1996-601643	B2 B1 A	19950526 19951027 19960214		
AB	<p><b>A curable compn.</b> comprises a stable, water dispersible or emulsifiable <b>curable</b> polymer, contg. a sterically hindered alkoxyLATED silane group, 0.1-75%, a water-dispersible or water-sol., hydrolytically stable organometallic catalyst 0.1-10%, and H<sub>2</sub>O 24.9-99.8%. These <b>compns.</b> are useful as adhesives, sealants and paints. Films of the <b>compns.</b> have solvent resistance, adhesion, hardness, abrasion resistance and mar resistance. Examples of catalysts include dihydroxy bis [2-hydroxypropanato (2-)O1,O2] titanate, mixed Ti ortho ester complexes, acetylacetone chelate, bis(ethyl-3-oxobutanolato-O1,O3) bis(2-propanolato) Ti, alkanolamine complex of Ti and mercaptoalc., mercaptide or sulfide forms of diorganotins having either a Sn-S or Sn:S bond. Emulsions of Bu acrylate-3-methacryloxypropyltriocetylloxysilane-vinyl acetate (11.6:19.6:68.8) copolymer contg. 5% TYZOR 131 catalyst only increased the viscosity from 960 to 1060 cP after storage at room temp. for two months.</p>				
ST	<p>silyl ester pendant resin stable emulsion; titanate catalyst <b>curing</b> methacryloxypropyltriocetylloxysilane copolymer; alkanolamine titanium complex catalyst <b>curing</b>; sulfide organotin complex catalyst <b>curing</b>; mercaptide organotin complex catalyst <b>curing</b>; solvent resistance coating film silylated polymer</p>				
IT	<p>Adhesion, physical (aq. sterically hindered silylated polymer <b>curable</b> <b>compns.</b> with good storage stability and NMP paint)</p>				
IT	<p>Coating materials (aq. sterically hindered silylated polymer <b>curable</b> <b>compns.</b> with good storage stability for)</p>				
IT	<p>Crosslinking catalysts (for good <b>cure</b> and film appearance; in aq. sterically hindered silylated polymer <b>curable</b> <b>compns.</b> with good storage stability)</p>				
IT	<p>189458-70-6P 189458-72-8P 189458-73-9P 189458-74-0P <b>189458-75-1P</b> RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (aq. sterically hindered silylated polymer <b>curable</b> <b>compns.</b> with good storage stability)</p>				
IT	<p>1185-81-5, Fomrez UL-32 31685-54-8, Fomrez UL-1 65104-06-5, Tyzor LA 74913-27-2, Fomrez UL-22 109768-37-8, Tyzor 131 189767-64-4, PE 1013 RL: CAT (Catalyst use); USES (Uses) (in aq. sterically hindered silylated polymer <b>curable</b> <b>compns.</b> with good storage stability)</p>				
IT	<p>189458-72-8P 189458-74-0P 189458-75-1P RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (aq. sterically hindered silylated polymer <b>curable</b> <b>compns.</b> with good storage stability)</p>				
RN	189458-72-8 HCPLUS				
CN	2-Propenoic acid, 2-methyl-, 3-[tris(2-methylpropoxy)silyl]propyl ester,				

polymer with butyl 2-propenoate and ethenyl acetate (9CI) (CA INDEX NAME)

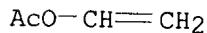
CM 1

CRN 189458-71-7  
CMF C19 H38 O5 Si

CM 2

CRN 141-32-2  
CMF C7 H12 O2

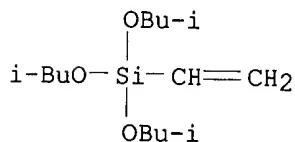
CM 3

CRN 108-05-4  
CMF C4 H6 O2

RN 189458-74-0 HCPLUS

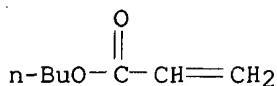
CN 2-Propenoic acid, butyl ester, polymer with ethenyl acetate and ethenyltris(2-methylpropoxy)silane (9CI) (CA INDEX NAME)

CM 1

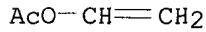
CRN 18545-02-3  
CMF C14 H30 O3 Si

CM 2

CRN 141-32-2  
CMF C7 H12 O2

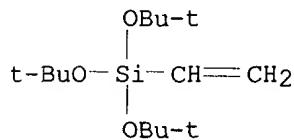


CM 3

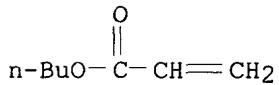
CRN 108-05-4  
CMF C4 H6 O2

RN 189458-75-1 HCPLUS  
 CN 2-Propenoic acid, butyl ester, polymer with ethenyl acetate and  
 tris(1,1-dimethylethoxy)ethenylsilane (9CI) (CA INDEX NAME)

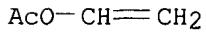
CM 1

CRN 5356-88-7  
CMF C14 H30 O3 Si

CM 2

CRN 141-32-2  
CMF C7 H12 O2

CM 3

CRN 108-05-4  
CMF C4 H6 O2

L30 ANSWER 16 OF 25 HCPLUS COPYRIGHT 2002 ACS  
 AN 1997:18278 HCPLUS  
 DN 126:61644  
 TI polyoxyethylene- and silyl group-containing unsaturated resin-based

KATHLEEN FULLER EIC 1700/LAW LIBRARY 308-4290

antifouling coatings  
 IN Ito, Masayasu; Matsubara, Yoshiro; Arakawa, Kenichi; Pponda, Yoshihiro  
 PA Nippon Oils & Fats Co Ltd, Japan  
 SO Jpn. Kokai Tokkyo Koho, 23 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D005-16  
 ICS C09D005-16; C09D133-14; C09D135-02; C09D143-04; C09D171-02  
 CC 42-10 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 5  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
PI	JP 08277372	A2	19961022	JP 1995-104852	19950404			
AB	Title coatings contain Ph3B pyridine (I)-contg. metal compd.-free antifouling agents and resins prep'd. from XSiR1R2R3 [R1-R3 = alkyl, aryl; X = (meth)acryloyloxy, maleoyloxy, fumaloyloxy, itaconoyloxy], and Y(CH <sub>2</sub> CH <sub>2</sub> O) <sub>n</sub> R4 [R4 = alkyl, aryl; Y = (meth)acryloyloxy, maleoyloxy, fumaloyloxy, itaconoyloxy; n = 1-25]. A compn. contg. dimethyl(tert-butyl)silyl acrylate-diphenyl(tert-butyl)silyl methacrylate-Me methacrylate (II)-ethylene glycol Me ether acrylate-styrene copolymer, Bu methacrylate-II-ethylene glycol Me ether methacrylate-tri(iso-Pr)silyl acrylate copolymer and I showed good crack resistance, antifouling ability over 2 yr, and film consumption rate 4.2 .mu.m/mo.							
ST	silyl polyoxyethylene unsatd resin antifouling coating; triphenylboron pyridine antifouling agent coating; crack resistance unsatd resin antifouling coating							
IT	Acrylic polymers, uses RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (antifouling coatings contg. triphenylborone pyridine and unsatd. resins contg. polyoxyethylene and silyl groups)							
IT	Coating materials (antifouling; antifouling coatings contg. triphenylborone pyridine and unsatd. resins contg. polyoxyethylene and silyl groups)							
IT	Vinyl compounds, uses RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polymers; antifouling coatings contg. triphenylborone pyridine and unsatd. resins contg. polyoxyethylene and silyl groups)							
IT	148-79-8	719-96-0, N-(Fluorodichloromethylthio)phthalimide	971-66-4	1085-98-9	1897-45-6, 2,4,5,6-Tetrachloroisophthalonitrile	13108-52-6,		
	2,3,5,6-Tetrachloro-4-(methylsulfonyl)pyridine					13167-25-4	20018-09-1,	
	Diiodomethyl-p-tolylsulfone					21564-17-0	2-(Thiocyanomethylthio)benzothiazole	
						28159-98-0	64359-81-5, 4,5-Dichloro-2-n-octyl-isothiazol-3-one	
						67412-55-9, N,N-Dimethyldichlorophenylurea		
	RL: MOA (Modifier or additive use); USES (Uses) (antifouling agent; antifouling coatings contg. triphenylborone pyridine and unsatd. resins contg. polyoxyethylene and silyl groups)							
IT	167307-15-5P	167307-16-6P	167307-17-7P	167307-18-8P	167307-19-9P	184432-50-6P	184432-53-9P	184950-93-4P
	RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (antifouling coatings contg. triphenylborone pyridine and unsatd. resins contg. polyoxyethylene and silyl groups)							
IT	184432-50-6P					RL: IMF (Industrial manufacture); POF (Polymer in formulation);		

TEM (Technical or engineered material use); PREP (Preparation);  
 USES (Uses)

(antifouling coatings contg. triphenylborone pyridine and unsatd.  
 resins contg. polyoxyethylene and silyl groups)

RN 184432-50-6 HCPLUS

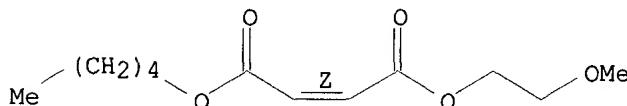
CN 2-Butenedioic acid (2Z)-, (1,1-dimethylethyl)diphenylsilyl pentyl ester,  
 polymer with ethenyl acetate, ethenylbenzene and 2-methoxyethyl pentyl  
 (2Z)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 184432-49-3

CMF C12 H20 O5

Double bond geometry as shown.

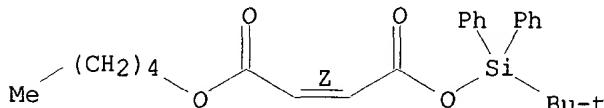


CM 2

CRN 184432-48-2

CMF C25 H32 O4 Si

Double bond geometry as shown.



CM 3

CRN 108-05-4

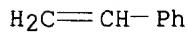
CMF C4 H6 O2



CM 4

CRN 100-42-5

CMF C8 H8



L30 ANSWER 17 OF 25 HCPLUS COPYRIGHT 2002 ACS  
 AN 1996:761719 HCPLUS  
 DN 126:33133

KATHLEEN FULLER EIC 1700/LAW LIBRARY 308-4290

TI Unsaturated polyoxyethylene resin and unsaturated silyl resin blend-based antifouling coatings  
 IN Akiba, Yasuhide; Pponda, Yoshihiro; Matsubara, Yoshiro; Ito, Masayasu; Arakawa, Kenichi  
 PA Nippon Oils & Fats Co Ltd, Japan  
 SO Jpn. Kokai Tokkyo Koho, 19 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D143-04  
 ICS C09D005-16; C09D133-14; C09D135-02; C09D171-02  
 CC 42-10 (Coatings, Inks, and Related Products)  
 Section cross-reference(s) : 5

## FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08269390	A2	19961015	JP 1995-99773	19950330
AB Title coatings contain antifouling agents, XSiR1R2R3 [R1-R3 = alkyl, aryl; X = (meth)acryloyloxy, maleoyloxy, fumaloyloxy, itaconoyloxy]-based resins, and Y(CH <sub>2</sub> CH <sub>2</sub> ) <sub>n</sub> R4 [R4 = alkyl, aryl; Y = (meth)acryloyloxy, maleoyloxy, fumaloyloxy, itaconoyloxy; n = 1-25]-based resins. A compn. contg. Cu <sub>2</sub> O, Me methacrylate (I)-styrene-dimethyl(tert-Bu)silyl acrylate-diphenyl(tert-Bu)silyl methacrylate copolymer, Bu methacrylate (II)-I-triisopropylsilyl acrylate copolymer, and I-II-ethylene glycol Me ether methacrylate copolymer showed good crack resistance, antifouling ability over 18 mo, and film consumption rate 6.6 .mu.m/mo.					
ST unsatd polyoxyethylene resin blend antifouling coating; silyl unsatd resin blend antifouling coating; crack resistance acrylic blend antifouling coating					
IT Coating materials (antifouling; unsatd. polyoxyethylene resin and unsatd. silyl resin blend-based antifouling coatings)					
IT Vinyl compounds, uses RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polymers; unsatd. polyoxyethylene resin and unsatd. silyl resin blend-based antifouling coatings)					
IT Acrylic polymers, uses Polymer blends RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (unsatd. polyoxyethylene resin and unsatd. silyl resin blend-based antifouling coatings)					
IT 137-30-4, Zinc dimethyldithiocarbamate 719-96-0, N-(Fluorodichloromethylthio)phthalimide 971-66-4 1317-39-1, Cuprous oxide, uses 1897-45-6, 2,4,5,6-Tetrachloroisophthalonitrile 11101-28-3 13108-52-6, 2,3,5,6-Tetrachloro-4-(methylsulfonyl)pyridine 13167-25-4, N-(2,4,6-Trichlorophenyl)maleimide 13463-41-7 21564-17-0, 2-(Thiocyanomethylthio)benzothiazole 26656-82-6, Copper thiocyanate 55406-53-6, 3-Iodo-2-propynyl butylcarbamate 64359-81-5, 4,5-Dichloro-2-n-octyl-3(2H)isothiazolone 67412-55-9 RL: MOA (Modifier or additive use); USES (Uses) (antifouling agent; unsatd. polyoxyethylene resin and unsatd. silyl resin blend-based antifouling coatings)					
IT 28628-64-0P, Ethylene glycol acrylate methyl ether homopolymer 116767-33-0P, Methyl methacrylate-tributylsilyl methacrylate copolymer 134652-61-2P, Tri(isopropyl)silyl methacrylate homopolymer 184534-87-0P, Dimethyl(tert-butyl)silyl acrylate-diphenyl(tert-butyl)silyl methacrylate-methyl methacrylate-styrene copolymer 184534-88-1P, Butyl					

methacrylate-methyl methacrylate-tri(isopropyl)silyl acrylate copolymer  
 184534-89-2P, Diphenyl(tert-butyl)silyl methacrylate-methyl  
 methacrylate-octyl acrylate copolymer **184534-90-5P**,  
 Diphenyl(tert-butyl)silyl pentyl maleate-styrene-vinyl acetate copolymer  
 184534-91-6P, Tributylsilyl pentyl fumarate-styrene-vinyl acetate  
 copolymer 184534-92-7P, Tributylsilyl pentyl itaconate-vinyl acetate  
 copolymer 184534-93-8P, Butyl methacrylate-ethylene glycol methyl ether  
 methacrylate-methyl methacrylate copolymer 184534-94-9P, Butyl  
 acrylate-diethylene glycol ethyl ether acrylate-polyoxyethylene phenyl  
 ether methacrylate copolymer 184534-95-0P, Methyl methacrylate-  
 poly(ethylene glycol) butyl ether methacrylate copolymer 184534-96-1P  
 184534-97-2P 184534-98-3P 184534-99-4P

RL: **IMF (Industrial manufacture)**; POF (Polymer in formulation);  
 TEM (Technical or engineered material use); **PREP (Preparation)**;  
 USES (Uses)

(unsatd. polyoxyethylene resin and unsatd. silyl resin blend-based  
 antifouling coatings)

IT **184534-90-5P**, Diphenyl(tert-butyl)silyl pentyl  
 maleate-styrene-vinyl acetate copolymer

RL: **IMF (Industrial manufacture)**; POF (Polymer in formulation);  
 TEM (Technical or engineered material use); **PREP (Preparation)**;  
 USES (Uses)

(unsatd. polyoxyethylene resin and unsatd. silyl resin blend-based  
 antifouling coatings)

RN 184534-90-5 HCAPLUS

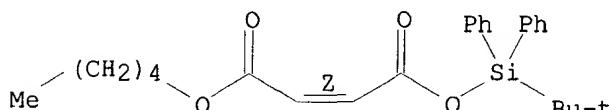
CN 2-Butenedioic acid (2Z)-, (1,1-dimethylethyl)diphenylsilyl pentyl ester,  
 polymer with ethenyl acetate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 184432-48-2

CMF C25 H32 O4 Si

Double bond geometry as shown.



CM 2

CRN 108-05-4

CMF C4 H6 O2

AcO—CH=CH2

CM 3

CRN 100-42-5

CMF C8 H8

H2C=CH—Ph

L30 ANSWER 18 OF 25 HCAPLUS COPYRIGHT 2002 ACS  
AN 1996:756273 HCAPLUS  
DN 126:33135  
TI Polyoxyethylene- and silyl-containing unsaturated resin-based antifouling coatings  
IN Ito, Masayasu; Pponda, Yoshihiro; Matsubara, Yoshiro; Arakawa, Kenichi; Akiba, Yasuhide  
PA Nippon Oils & Fats Co Ltd, Japan  
SO Jpn. Kokai Tokkyo Koho, 24 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM C09D143-04  
ICS C08F290-06; C09D005-16; C09D133-14  
CC 42-10 (Coatings, Inks, and Related Products)  
Section cross-reference(s): 5  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08269388	A2	19961015	JP 1995-97768	19950329
AB	Title coatings contain bis(2-pyridinethio-1-oxide) Cu salt (I) as antifouling agent and polymers prep'd. from XS <sub>i</sub> R <sub>1</sub> R <sub>2</sub> R <sub>3</sub> [R <sub>1</sub> -R <sub>3</sub> = C <sub>1</sub> -20 hydrocarbyl; X = (meth)acryloyloxy, maleoyloxy, fumaloyloxy, itaconoyloxy] and Y(CH <sub>2</sub> CH <sub>2</sub> O) <sub>n</sub> R <sub>4</sub> [R <sub>4</sub> = alkyl, aryl; Y = (meth)acryloyloxy, maleoyloxy, fumaloyloxy, itaconoyloxy; n = 1-25]. A compn. contg. Cu <sub>2</sub> O, I, Me methacrylate (II)-styrene-dimethyl(tert-butyl)silyl acrylate-diphenyl(tert-butyl)silyl methacrylate-ethylene glycol acrylate Me ether copolymer, and Bu methacrylate-II-tri(isopropyl)silyl acrylate-ethylene glycol methacrylate Me ether copolymer showed good crack resistance, antifouling ability over 2 yr, and film consumption rate 8.6 .mu.m/mo.				
ST	polyoxyethylene silyl unsatd resin antifouling coating; crack resistance antifouling acrylic coating				
IT	Coating materials (antifouling; polyoxyethylene- and silyl-contg. unsatd. resin-based antifouling coatings)				
IT	Vinyl compounds, uses RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polymers; polyoxyethylene- and silyl-contg. unsatd. resin-based antifouling coatings)				
IT	Acrylic polymers, uses Polymer blends RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyoxyethylene- and silyl-contg. unsatd. resin-based antifouling coatings)				
IT	14915-37-8, Bis(2-pyridinethiol 1-oxide) copper RL: MOA (Modifier or additive use); USES (Uses) (antifouling agent; polyoxyethylene- and silyl-contg. unsatd. resin-based antifouling coatings)				
IT	167307-15-5P	167307-17-7P	167307-18-8P	184432-42-6P	184432-46-0P <b>184432-50-6P</b>
					184432-53-9P
					184432-57-3P
	RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyoxyethylene- and silyl-contg. unsatd. resin-based antifouling coatings)				

IT 184432-50-6P

RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 TEM (Technical or engineered material use); PREP (Preparation);  
 USES (Uses)  
 (polyoxyethylene- and silyl-contg. unsatd. resin-based antifouling  
 coatings)

RN 184432-50-6 HCPLUS

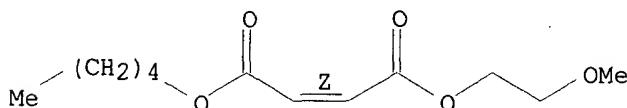
CN 2-Butenedioic acid (2Z)-, (1,1-dimethylethyl)diphenylsilyl pentyl ester,  
 polymer with ethenyl acetate, ethenylbenzene and 2-methoxyethyl pentyl  
 (2Z)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 184432-49-3

CMF C12 H20 O5

Double bond geometry as shown.

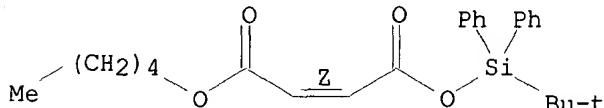


CM 2

CRN 184432-48-2

CMF C25 H32 O4 Si

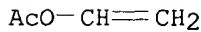
Double bond geometry as shown.



CM 3

CRN 108-05-4

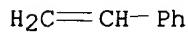
CMF C4 H6 O2



CM 4

CRN 100-42-5

CMF C8 H8



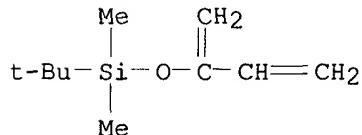
AN 1996:660048 HCPLUS  
 DN 125:301698  
 TI Reactive polymers incorporating silyl enol ether groups. I. Synthesis by radical polymerization of 2-(trimethylsiloxy)-butadiene and 2-(tert-butyldimethylsiloxy)butadiene  
 AU Penelle, Jacques; Mayne, Veronique; Touillaux, Rolland  
 CS Dep. Chim., Univ. Cathol. Louvain, Louvain-la-Neuve, B-1348, Belg.  
 SO Journal of Polymer Science, Part A: Polymer Chemistry (1996), 34(16), 3369-3378  
 CODEN: JPACEC; ISSN: 0887-624X  
 PB Wiley  
 DT Journal  
 LA English  
 CC 35-4 (Chemistry of Synthetic High Polymers)  
 AB 2-(Trimethylsiloxy)butadiene (TMSBD) and 2-(tert-butyldimethylsiloxy)butadiene (TBMSBD) were copolymerd. with styrene (St) and Me methacrylate (MMA) under free-radical conditions. The polymers obtained contained reactive silyl enol ether groups in a ratio identical to the TMSBD or TBMSBD molar fraction in the copolymer. All investigated samples displayed only 1,4- and 3,4-microstructures. The influence of several exptl. factors on the yields, rates of polymn., microstructures, and copolymer compns. were examd. Monomer reactivity ratios r<sub>1</sub> and r<sub>2</sub> at 60.degree. were detd. from copolymer compn. curves at low conversions. The homopolymn. of TBMSBD was also investigated and the results were compared with those previously obtained for TMSBD. A slight increase in rates was obsd. and was rationalized on the basis of the higher viscosity resulting from the structural change in the monomer. Thermal stabilities of the synthesized polymers were investigated by TGA and their glass transition temps. were detd. by DSC. All measurements are compatible with a possible use of TMSBD and TBMSBD copolymers as reactive polymers.  
 ST radical polymn alkylsiloxy butadiene; kinetics radical polymn alkylsiloxy butadiene; thermal property microstructure alkylsiloxy butadiene polymer; siloxy contg butadiene polymer prep property  
 IT Chains, chemical  
     (microstructure of; of (trimethylsiloxy)butadiene and (tert-butyldimethylsiloxy)butadiene homopolymers and copolymers with Me methacrylate and styrene)  
 IT Glass temperature and transition  
     (of (trimethylsiloxy)butadiene and (tert-butyldimethylsiloxy)butadiene homopolymers and copolymers with Me methacrylate and styrene)  
 IT Kinetics of polymerization  
 Polymerization  
 Reactivity ratio in polymerization  
     (radical, of (trimethylsiloxy)butadiene and (tert-butyldimethylsiloxy)butadiene with Me methacrylate and styrene)  
 IT 1833-53-0, 2-Trimethylsiloxypropene  
 RL: PRP (Properties)  
     (model compd.; in prepn. and microstructural and thermal anal. of reactive polymers contg. silyl enol ether groups)  
 IT 17510-47-3P, 3-Trimethylsiloxy-2-pentene 183239-37-4P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
     (model compd.; in prepn. and microstructural and thermal anal. of reactive polymers contg. silyl enol ether groups)  
 IT 38053-91-7P, 2-(Trimethylsiloxy)-1,3-butadiene 80738-05-2P  
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)  
     (monomer; in prepn. and microstructural and thermal anal. of reactive polymers contg. silyl enol ether groups)

IT 129757-89-7P, 2-(Trimethylsiloxy)butadiene homopolymer 129757-90-0P,  
 Styrene-2-(trimethylsiloxy)butadiene copolymer 129757-91-1P  
**181950-96-9P 183239-35-2P 183239-36-3P**  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP  
 (Preparation)  
 (prepn. and microstructural and thermal anal. of)  
 IT 75-77-4, Trimethylsilyl chloride, reactions 78-94-4, Methyl vinyl  
 ketone, reactions 96-22-0, 3-Pentanone 504-57-4, 10-Nonadecanone  
 18162-48-6, tert-Butyldimethylsilyl chloride  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reactant; in prepn. and microstructural and thermal anal. of reactive  
 polymers contg. silyl enol ether groups)  
 IT **181950-96-9P 183239-35-2P 183239-36-3P**  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP  
 (Preparation)  
 (prepn. and microstructural and thermal anal. of)  
 RN 181950-96-9 HCPLUS  
 CN Silane, (1,1-dimethylethyl)dimethyl[(1-methylene-2-propenyl)oxy]-, polymer  
 with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 80738-05-2

CMF C10 H20 O Si



CM 2

CRN 100-42-5

CMF C8 H8

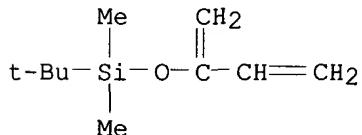
 $\text{H}_2\text{C}=\text{CH}-\text{Ph}$ 

RN 183239-35-2 HCPLUS  
 CN Silane, (1,1-dimethylethyl)dimethyl[(1-methylene-2-propenyl)oxy]-,  
 homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 80738-05-2

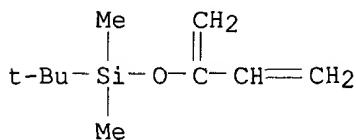
CMF C10 H20 O Si



RN 183239-36-3 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
 (1,1-dimethylethyl)dimethyl[(1-methylene-2-propenyl)oxy]silane (9CI) (CA  
 INDEX NAME)

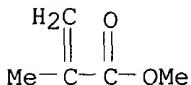
CM 1

CRN 80738-05-2  
 CMF C10 H20 O Si



CM 2

CRN 80-62-6  
 CMF C5 H8 O2



L30 ANSWER 20 OF 25 HCAPLUS COPYRIGHT 2002 ACS  
 AN 1996:554495 HCAPLUS  
 DN 125:198724  
 TI Fluoro resin coating **compositions** with good soiling and weather  
 resistance  
 IN Hirashima, Yoshi; Maeda, Kazuhiko; Tsutsumi, Kentaro  
 PA Central Glass Co Ltd, Japan  
 SO Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D127-12  
 ICS C09D127-12; C09D171-02  
 CC 42-10 (**Coatings, Inks, and Related Products**)  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08157766	A2	19960618	JP 1994-300964	19941205
	US 5684074	A	19971104	US 1995-548062	19951025

PRAI JP 1994-260407 19941025  
 JP 1994-300964 19941205

AB Title **compns.**, useful for automobiles, buildings, etc., comprise  
 fluoropolymers with OH value 80-200 mg-KOH/g, prep'd. by copolyrn. of  
 fluoro olefins 40-65, vinyl comonomers 14-50, hydroxy compds. 12-25, and  
 other comonomers 0.1-12 mol%, 100, polyoxytetramethylene glycol with  
 no.-av. mol. wt. (Mn) 160-4000 1-25, and alkyl silicates 1-15 parts.  
 Thus, mixing 100 parts a fluoropolymer prep'd. from  
 chlorotrifluoroethylene, tetrafluoroethylene, vinyl acetate, Et vinyl  
 ether, hydroxybutyl vinyl ether, glycerin monoallyl ether and

vinyltriethoxysilane with 5 parts PTMG 2000 5, 10 parts M silicate 51 and a **curing** agent, coating on an Al plate, and **curing** at room temp. for 2 days gave a coat film showing good soiling and weather resistance after 6 mo outdoor exposure.

ST fluoropolymer coating soiling weather resistance; polytetramethylene glycol fluoropolymer coating; alkyl silicate fluoropolymer coating

IT Fluoropolymers

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (crosslinkable **compns.**; fluoro resin coating **compns**. with good soiling and weather resistance)

IT Urethane polymers

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (fluoro resin coating **compns.** with good soiling and weather resistance)

IT Coating materials

(antisoiling, fluoro resin coating **compns.** with good soiling and weather resistance)

IT 181033-43-2P 181033-44-3P 181076-77-7P 181192-13-2P  
 181192-14-3P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (crosslinkable **compns.**; fluoro resin coating **compns**. with good soiling and weather resistance)

IT 11099-06-2, Ethyl Silicate 45 136959-63-2, M-Silicate 51

RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (fluoro resin coating **compns.** with good soiling and weather resistance)

IT 25190-06-1

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (fluoro resin coating **compns.** with good soiling and weather resistance)

IT 181033-44-3P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (crosslinkable **compns.**; fluoro resin coating **compns**. with good soiling and weather resistance)

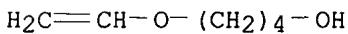
RN 181033-44-3 HCPLUS

CN Acetic acid ethenyl ester, polymer with chlorotrifluoroethene, ethenyl 2,2-dimethylpropanoate, 4-(ethenyloxy)-1-butanol, ethenyltriethoxysilane, ethoxyethene, 2(or 3)-(2-propenyloxy)-1,?-propanediol and 3,3,3-trifluoro-2-(trifluoromethyl)-1-propene (9CI) (CA INDEX NAME)

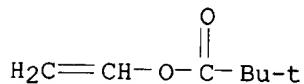
CM 1

CRN 17832-28-9

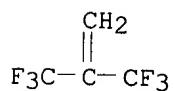
CMF C6 H12 O2



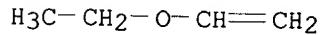
CM 2

CRN 3377-92-2  
CMF C7 H12 O2

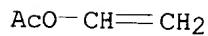
CM 3

CRN 382-10-5  
CMF C4 H2 F6

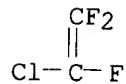
CM 4

CRN 109-92-2  
CMF C4 H8 O

CM 5

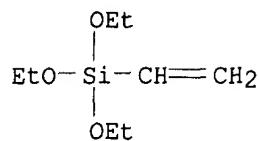
CRN 108-05-4  
CMF C4 H6 O2

CM 6

CRN 79-38-9  
CMF C2 Cl F3

CM 7

CRN 78-08-0  
CMF C8 H18 O3 Si

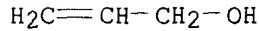


CM 8

CRN 25136-53-2  
 CMF C6 H12 O3  
 CCI IDS

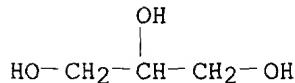
CM 9

CRN 107-18-6  
 CMF C3 H6 O



CM 10

CRN 56-81-5  
 CMF C3 H8 O3



L30 ANSWER 21 OF 25 HCPLUS COPYRIGHT 2002 ACS  
 AN 1996:175672 HCPLUS  
 DN 124:203396  
 TI Production of organopolysiloxanes containing hydrolyzable functional groups, and curable compositions therefrom  
 IN Yamamoto, Kenji; Tanaka, Jouichi; Yoshikawa, Yuji; Yamaya, Masaaki  
 PA Shin-Etsu Chemical Co., Ltd., Japan  
 SO Eur. Pat. Appl., 21 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 IC ICM C08G077-06  
 ICS C08G077-16; C08G077-18  
 CC 35-7 (Chemistry of Synthetic High Polymers)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 691362	A2	19960110	EP 1995-110432	19950704
	EP 691362	A3	19961009		
	EP 691362	B1	20001025		
	R: DE, FR, GB				
	JP 08020646	A2	19960123	JP 1994-177524	19940706

US 5633311 A 19970527 US 1995-498917 19950706  
 PRAI JP 1994-177524 A 19940706

AB Title organopolysiloxanes are prepd. by hydrolytic condensation of organoalkoxysilanes and/or organoalkoxysiloxanes, wherein .gtoreq.50% by wt. is organoalkoxysilanes and/or organoalkoxysiloxanes of av. compn. R<sub>1</sub>aSiX<sub>b</sub>Y<sub>c</sub>O(4-a-b-c)/2 [R<sub>1</sub> = (substituted) alkyl, alkenyl or aryl; X = C<sub>1</sub>-10 alkoxy group; y = C<sub>2</sub>-10 alkoxy different from X and has a hydrolysis rate lower than that of X; a = 0-2; b and c = 0.1-3; a + b + c .ltoreq.4]. The organopolysiloxanes are gel-free and give reproducible products and performance. Thus, 3 mol MeSi(OMe)<sub>3</sub> and 4 mol iso-BuOH were reacted in the presence of H<sub>2</sub>SO<sub>4</sub> to give 80% MeSi(OMe)<sub>2</sub>(OBu) and 5% MeSi(OMe)(OBu)<sub>2</sub>, a 20% soln. of which (300 g) was mixed with 100 g MeSi(OC(CH<sub>3</sub>):CH<sub>2</sub>)<sub>3</sub> and applied to a polished steel plate, forming a transparent, glossy, uniform film (tack-free in 10 min) having pencil hardness 5H and nonpeeling in a cross-cut adhesion test.

ST hydrolyzable group organopolysiloxane prep; siloxane hydrolyzable group prep; coating hydrolyzable organopolysiloxane; alc alkoxysilane reaction

IT Coating materials  
 (prodn. of organopolysiloxanes contg. hydrolyzable functional groups, their **curable** compns., and use as coatings)

IT Siloxanes and Silicones, preparation  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (prodn. of organopolysiloxanes contg. hydrolyzable functional groups, their **curable** compns., and use as coatings)

IT Alcohols, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction with silanes; prodn. of organopolysiloxanes contg. hydrolyzable functional groups, and **curable** compns. therefrom)

IT Silanes  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (alkoxy, reaction with alcs.; prodn. of organopolysiloxanes contg. hydrolyzable functional groups, and **curable** compns. therefrom)

IT Silanes  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (alkylalkoxy, reaction with alcs.; prodn. of organopolysiloxanes contg. hydrolyzable functional groups, and **curable** compns. therefrom)

IT Polymerization  
 (hydrolytic, prodn. of organopolysiloxanes contg. hydrolyzable functional groups, and **curable** compns. therefrom)

IT 174613-78-6P 174613-79-7P 174613-80-0P 174613-82-2P  
 174613-83-3P  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (prepn. and coating from; prodn. of organopolysiloxanes contg. hydrolyzable functional groups, and **curable** compns. therefrom)

IT 55606-93-4P, tert-Butoxydimethoxymethylsilane 174613-68-4P  
 174613-77-5P 174613-81-1P  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (prepn. as monomer; prodn. of organopolysiloxanes contg. hydrolyzable functional groups, and **curable** compns. therefrom)

IT 34707-69-2P, Dimethoxydi-iso-propoxysilane 61680-45-3P,  
 Iso-Propoxytrimethoxysilane 154749-42-5P, 1-Hexaoxytrimethoxysilane  
 174613-60-6P, Dimethoxy-iso-propoxymethylsilane 174613-61-7P,  
 Iso-Butoxypentamethoxydisiloxane 174613-62-8P,

Dipropoxymethoxyphenylsilane 174613-63-9P, Di-iso-butoxymethoxymethylsilane 174613-64-0P, Di-iso-propoxymethoxymethylsilane 174613-65-1P 174613-66-2P 174613-67-3P 174613-70-8P  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. as monomer; prodn. of organopolysiloxanes contg. hydrolyzable functional groups, and **curable** compns. therefrom)

IT 174613-69-5P  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (prodn. of organopolysiloxanes contg. hydrolyzable functional groups, and **curable** compns. therefrom)

IT 174613-71-9P 174613-72-0P 174613-73-1P 174613-74-2P 174613-75-3P 174613-76-4P  
 RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)  
 (prodn. of organopolysiloxanes contg. hydrolyzable functional groups, and **curable** compns. therefrom)

IT 681-84-5 1185-55-3, Methyltrimethoxysilane 4371-91-9, Hexamethoxydisiloxane 5581-68-0, Methyltributoxysilane 17902-99-7, Phenyltripropoxysilane  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction with alcs.; prodn. of organopolysiloxanes contg. hydrolyzable functional groups, and **curable** compns. therefrom)

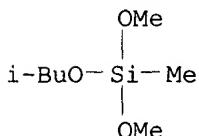
IT 67-56-1, Methanol, reactions 67-63-0, Isopropyl alcohol, reactions 75-65-0, reactions 78-83-1, Isobutyl alcohol, reactions 78-92-2, sec-Butyl alcohol 111-27-3, Hexyl alcohol, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction with alkoxysilanes; prodn. of organopolysiloxanes contg. hydrolyzable functional groups, and **curable** compns. therefrom)

IT 174613-79-7P  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (prepn. and coating from; prodn. of organopolysiloxanes contg. hydrolyzable functional groups, and **curable** compns. therefrom)

RN 174613-79-7 HCPLUS  
 CN Silane, dimethoxymethyl(2-methylpropoxy)-, polymer with dimethoxymethylbis(2-methylpropoxy)silane and methyltris[(1-methylethenyl)oxy]silane (9CI) (CA INDEX NAME)

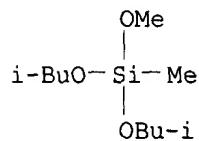
CM 1

CRN 174613-70-8  
 CMF C7 H18 O3 Si

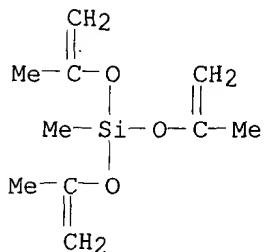


CM 2

CRN 174613-63-9  
 CMF C10 H24 O3 Si



CM 3

CRN 6651-38-3  
CMF C10 H18 O3 Si

L30 ANSWER 22 OF 25 HCPLUS COPYRIGHT 2002 ACS  
 AN 1995:708879 HCPLUS  
 DN 123:260027  
 TI Room temperature-**curable** multifunctional isocyanate-containing  
     coating **compositions**  
 IN Nishio, Tatsuo; Marumoto, Etsuzo; Iida, Akihito; Inukai, Hiroshi  
 PA Toa Gosei Kk, Japan  
 SO Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D175-04  
     ICS C09D175-04  
 CC 42-10 (**Coatings, Inks, and Related Products**)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07102211	A2	19950418	JP 1993-271193	19931005
	JP 3104775	B2	20001030		

AB The title **compns.** with good weatherability and antifouling  
     property comprise (i) (a) solvent-sol. fluorocopolymers contg. 3-20 mol%  
     OH-contg. monomers and (b) multifunctional isocyanates at wt. ratio  
     1.0 to <1.0 which are dissolved in (ii) org. solvent solns. of  
     silane-modified fluorocopolymers prepnd. by adding (c) 5-100 parts of  
     silanes contg. hydrolyzable groups or their lower condensation  
     products to (d) 100 parts (based on polymers) org. solvent solns. of sol.  
     fluorocopolymers contg. 10-20 mol% OH-contg. monomer units. Thus,  
     tetraethoxysilane 13, methyltriethoxysilane 10, and p-toluenesulfonic acid  
     0.01 g were added dropwise to 25 g 50:32:18 (mol%) chlorotrifluoroethylene  
     (I)-vinyl propionate (II)-hydroxyethyl crotonate (III) copolymer with Tg  
     35.degree. dissolved in xylene-Bu cellosolve (IV) mixt., 3.9 g H2O and 3 g  
     IV were added dropwise successively, and stirred to give a 33%-solid

transparent soln. (B-1). A dispersion (MB-1) comprising 45:33:11:11 (mol%) I-II-VeoVa 9-III copolymer 60% xylene soln. 80, CR 97 (TiO<sub>2</sub>) 30, Disperbyk 101 0.6, and xylene 45 g was prep'd. A coating comprising MB-1 30, B-1 4.5, Coronate HX (HMDI) 2, dibutyltin dilaurate 0.1% soln. 0.4, and xylene 4 g gave good weatherability to chromated Al plate.

ST fluoropolymer silane modification coating weatherability; isocyanate silane modified fluoropolymer coating

IT Coating materials  
 (room temp.-**curable** coatings. contg. isocyanates, fluoropolymers, and silane-modified fluoropolymers with weatherability)

IT Siloxanes and Silicones, uses  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (polyurethane-, fluorine-contg., room temp.-**curable** coatings. contg. isocyanates, fluoropolymers, and silane-modified fluoropolymers with weatherability)

IT Fluoropolymers  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (polyurethane-siloxane-, room temp.-**curable** coatings. contg. isocyanates, fluoropolymers, and silane-modified fluoropolymers with weatherability)

IT Urethane polymers, uses  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (siloxane-, fluorine-contg., room temp.-**curable** coatings. contg. isocyanates, fluoropolymers, and silane-modified fluoropolymers with weatherability)

IT 169479-68-9P 169479-69-0P 169479-70-3P  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (room temp.-**curable** coatings, contg. isocyanates, fluoropolymers, and silane-modified fluoropolymers, with weatherability)

IT 169323-74-4P 169323-75-5P 169323-76-6P  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (room temp.-**curable** coatings. contg. isocyanates, fluoropolymers, and silane-modified fluoropolymers with weatherability)

IT 7429-90-5, Aluminum, miscellaneous  
 RL: MSC (Miscellaneous)  
 (room temp.-**curable** coatings. contg. isocyanates, fluoropolymers, and silane-modified fluoropolymers with weatherability)

IT 169479-69-0P 169479-70-3P  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (room temp.-**curable** coatings, contg. isocyanates, fluoropolymers, and silane-modified fluoropolymers, with weatherability)

RN 169479-69-0 HCPLUS

CN Decanoic acid, ethenyl ester, polymer with chlorotrifluoroethene, Coronate HX, ethenyl 2,2-dimethylpropanoate, 2-(2-propenoxy)ethanol, silicic acid (H<sub>4</sub>SiO<sub>4</sub>) tetraethyl ester, triethoxymethylsilane and triethoxyphenylsilane (9CI) (CA INDEX NAME)

CM 1

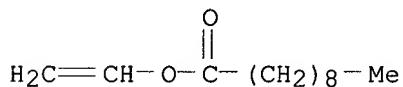
CRN 144245-98-7

CMF Unspecified  
 CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

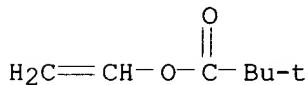
CM 2

CRN 4704-31-8  
 CMF C12 H22 O2



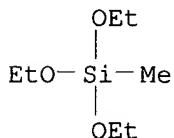
CM 3

CRN 3377-92-2  
 CMF C7 H12 O2



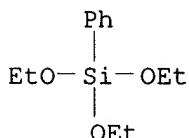
CM 4

CRN 2031-67-6  
 CMF C7 H18 O3 Si



CM 5

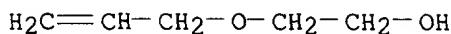
CRN 780-69-8  
 CMF C12 H20 O3 Si



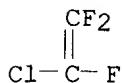
CM 6

CRN 111-45-5

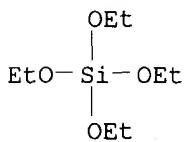
CMF C5 H10 O2



CM 7

CRN 79-38-9  
CMF C2 Cl F3

CM 8

CRN 78-10-4  
CMF C8 H20 O4 Si

RN 169479-70-3 HCAPLUS

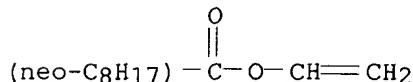
CN Neononanoic acid, ethenyl ester, polymer with chlorotrifluoroethene,  
Coronate HX, ethenyl 2,2-dimethylpropanoate, 2-hydroxyethyl 2-butenoate,  
silicic acid (H4SiO4) tetraethyl ester and triethoxymethylsilane (9CI)  
(CA INDEX NAME)

CM 1

CRN 144245-98-7  
CMF Unspecified  
CCI PMS, MAN

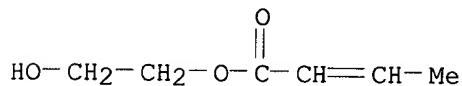
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 54423-67-5  
CMF C11 H20 O2  
CCI IDS

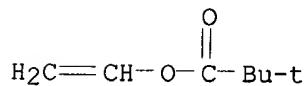
CM 3

CRN 21734-63-4  
CMF C6 H10 O3



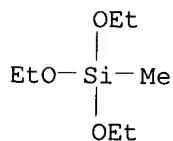
CM 4

CRN 3377-92-2  
CMF C7 H12 O2



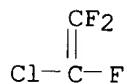
CM 5

CRN 2031-67-6  
CMF C7 H18 O3 Si



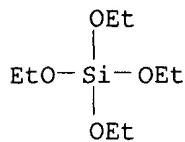
CM 6

CRN 79-38-9  
CMF C2 Cl F3



CM 7

CRN 78-10-4  
CMF C8 H20 O4 Si



L30 ANSWER 23 OF 25 HCAPLUS COPYRIGHT 2002 ACS  
 AN 1995:475871 HCAPLUS  
 DN 123:115599  
 TI Storage-stable staining-resistant coatings containing tri(organosilyl) ester-substituted polymers and copper  
 IN Honda, Yoshihiro; Masuoka, Shigeru; Ito, Masayasu; Taniguchi, Masashige; Fukuda, Shigeo  
 PA Nippon Oils & Fats Co Ltd, Japan  
 SO Jpn. Kokai Tokkyo Koho, 13. pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D133-00  
 ICS C09D005-14  
 CC 42-10 (Coatings, Inks, and Related Products)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07018216	A2	19950120	JP 1993-188711	19930630
	JP 3261220	B2	20020225		

OS MARPAT 123:115599  
 AB Title compns, useful for antifouling coatings on ship bottom, etc., contain polymers substituted with CO<sub>2</sub>SiR<sub>1</sub>R<sub>2</sub>R<sub>3</sub> (R<sub>1-3</sub> = C<sub>1-18</sub> alkyl, cycloalkyl, aryl, aralkyl), Cu (compds.), and R<sub>4</sub>(SiR<sub>5</sub>R<sub>6</sub>O)<sub>n</sub>R<sub>7</sub> (R<sub>4-6</sub> = H, C<sub>1-18</sub> alkyl, cycloalkyl, aryl, aralkyl, alkoxy, cycloalkoxy, aryloxy, arylalkoxy; R<sub>7</sub> = C<sub>1-18</sub> alkyl, cycloalkyl, aryl, aralkyl; n = 1-3). Thus, a 49.5%-nonvolatile soln. of 200:160:40 tributylsilyl methacrylate-Me methacrylate-Bu acrylate copolymer 35, Cu<sub>2</sub>O 40, red Fe oxide 5, talc 5, tricresyl phosphate 1, Disparlon 4300 0.5, tetrachloroisophthalonitrile 5, (EtO)<sub>4</sub>Si 1, and xylene 12 parts were mixed to give title compn. showing initial viscosity 7.8 P and 13.6 P after 6 mo at room temp.  
 ST organosilyl terminated polymer copper coating; storage stability silyl acrylic polymer; alkoxy silane blend silyl polymer coating; cuprous oxide acrylic polymer coating; staining resistance silyl polymer coating; antifouling acrylic polymer coating copper  
 IT Coating materials  
     (storage-stable antifouling organosilyl ester-terminated polymers contg. copper compds. and alkoxy silanes)  
 IT 166441-69-6P 166441-71-0P 166441-72-1P 166441-74-3P  
 166441-76-5P 166441-77-6P  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
     (storage-stable antifouling organosilyl ester-terminated polymer coatings contg. copper compds. and alkoxy silanes)  
 IT 78-10-4 1111-67-7 1317-39-1, Cuprous oxide, uses 2553-19-7, Diphenyldiethoxysilane 4766-57-8, Tetrabutoxysilane 7399-00-0, Octadecyltriethoxysilane 18419-59-5, 1,1,3,3,5-Pentaethoxy-1,3,5-trimethyltrisiloxane 166441-78-7  
 RL: MOA (Modifier or additive use); USES (Uses)  
     (storage-stable antifouling organosilyl ester-terminated polymer

coatings contg. copper compds. and alkoxy silanes)

IT 166441-76-5P

RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 TEM (Technical or engineered material use); PREP (Preparation);  
 USES (Uses)

(storage-stable antifouling organosilyl ester-terminated polymer  
 coatings contg. copper compds. and alkoxy silanes)

RN 166441-76-5 HCPLUS

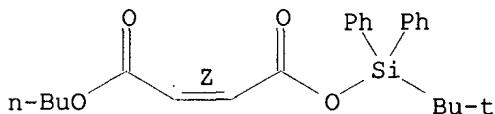
CN 2-Butenedioic acid (2Z)-, butyl (1,1-dimethylethyl)diphenylsilyl ester,  
 polymer with dimethyl (2Z)-2-butenedioate and ethenyl acetate (9CI) (CA  
 INDEX NAME)

CM 1

CRN 166441-75-4

CMF C24 H30 O4 Si

Double bond geometry as shown.

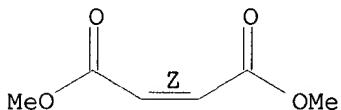


CM 2

CRN 624-48-6

CMF C6 H8 O4

Double bond geometry as shown.



CM 3

CRN 108-05-4

CMF C4 H6 O2

AcO—CH=CH2

L30 ANSWER 24 OF 25 HCPLUS COPYRIGHT 2002 ACS

AN 1995:360782 HCPLUS

DN 122:315425

TI Manufacture of fluorine-containing graft copolymers and solvent-type  
 coatings thereof

IN Inukai, Hiroshi; Nishio, Tatsuo; Marumoto, Etsuko; Iida, Akihito

PA Toa Gosei Chem Ind, Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese  
 IC ICM C08F299-08  
 ICS C09D157-00  
 CC 35-5 (Chemistry of Synthetic High Polymers)  
 Section cross-reference(s): 42

## FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06322053	A2	19941122	JP 1993-132449	19930511
AB	The title coatings with good weatherability, water repellency, and lubricity contain (a) the title F-contg. graft copolymers prep'd. by copolymerg. perfluoroolefins, silicone-type macromonomers contg. terminal vinyl ester bonds, and optionally, other comonomers, and (b) other F-contg. copolymers. Thus, 325 g chlorotrifluoroethylene (I) was mixed with EtOAc, 2-hydroxyethyl crotonate (II) 50, vinyl pivalate (III) 97.5, and CH <sub>2</sub> :CHOC(O)(CH <sub>2</sub> ) <sub>10</sub> Si(OMe)2OC2H4OC3H6(OSiMe <sub>2</sub> )3OC3H6OC2H4OH (IV) 50 g, heated at 64.degree., and polymd. in the presence of tert-butylperoxy pivalate to give 200 g graft copolymer composed of I/IV/III/II = 50/0.5/42/7.5 (mol%) with no. av. mol. wt. 29,200, glass transition temp. 36.4.degree., and OH value 28 mg-KOH/g, which was dissolved in BuOAc to give a 40%-solids soln. A curable transparent coating comprising the soln. 100, Coronate HX (polyisocyanate) 4.5, and MEK 25 parts was applied to a chromated Al plate and dried at ordinary temp. for 1 wk to give a test piece with cross-cut adhesion 100/100, initial contact angle 102, dynamic friction coeff. 0.03 .mu.m, and gloss retention and contact angle after 200 h in sun-shine weatherometer 96% and 101, resp.				
ST	fluoroolefin silicone macromonomer graft copolymer; coating fluoroolefin silicone copolymer weatherability; water resistance fluoroolefin silicone coating; gloss fluoroolefin silicone copolymer coating				
IT	Coating materials (solvent-type coatings contg. perfluoroolefin-silicone graft copolymers for improved weatherability and water repellency and lubricity)				
IT	Fluoropolymers RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (solvent-type coatings contg. perfluoroolefin-silicone graft copolymers for improved weatherability and water repellency and lubricity)				
IT	Siloxanes and Silicones, preparation RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (fluorine-contg., solvent-type coatings contg. perfluoroolefin-silicone graft copolymers for improved weatherability and water repellency and lubricity)				
IT	Siloxanes and Silicones, preparation RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyurethane-, fluorine-contg., solvent-type coatings contg. perfluoroolefin-silicone graft copolymers for improved weatherability and water repellency and lubricity)				
IT	Fluoropolymers RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyurethane-siloxane-, solvent-type coatings contg. perfluoroolefin-silicone graft copolymers for improved weatherability and water repellency and lubricity)				
IT	Fluoropolymers RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (siloxane-, solvent-type coatings contg. perfluoroolefin-silicone graft copolymers for improved weatherability and water repellency and				

lubricity)

IT Urethane polymers, preparation  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (siloxane-, fluorine-contg., solvent-type coatings contg.  
 perfluoroolefin-silicone graft copolymers for improved weatherability and water repellency and lubricity)

IT 7429-90-5, Aluminum, miscellaneous  
 RL: MSC (Miscellaneous)  
 (chromated, substrates; solvent-type coatings contg.  
 perfluoroolefin-silicone graft copolymers for improved weatherability and water repellency and lubricity)

IT 25190-89-0P, Hexafluoropropylene-tetrafluoroethylene-vinylidene fluoride copolymer **163388-19-0P** 163388-21-4P 163388-22-5P  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (solvent-type coatings contg. perfluoroolefin-silicone graft copolymers for improved weatherability and water repellency and lubricity)

IT **163388-19-0P**  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (solvent-type coatings contg. perfluoroolefin-silicone graft copolymers for improved weatherability and water repellency and lubricity)

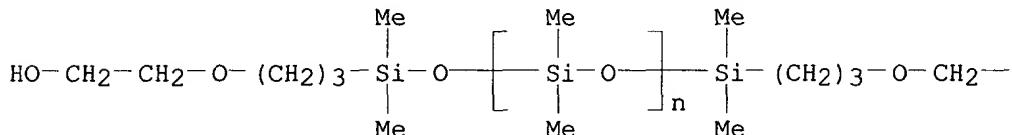
RN 163388-19-0 HCAPLUS

CN 2-Butenoic acid, 2-hydroxyethyl ester, polymer with chlorotrifluoroethene, Coronate HX, ethenyl 2,2-dimethylpropanoate and .alpha.-[[3-[2-[[[11-(ethoxyloxy)-11-oxoundecyl]dimethoxysilyl]oxy]ethoxy]propyl]dimethylsilyl]-.omega.-[[[3-(2-hydroxyethoxy)propyl]dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] (9CI) (CA INDEX NAME)

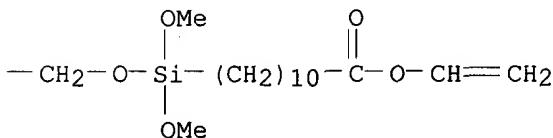
CM 1

CRN 163388-18-9  
 CMF (C<sub>2</sub> H<sub>6</sub> O Si)n C<sub>29</sub> H<sub>62</sub> O<sub>9</sub> Si<sub>3</sub>  
 CCI PMS

PAGE 1-A



PAGE 1-B



CM 2

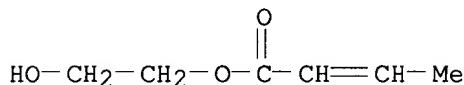
CRN 144245-98-7

CMF Unspecified  
 CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

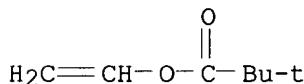
CM 3

CRN 21734-63-4  
 CMF C6 H10 O3



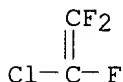
CM 4

CRN 3377-92-2  
 CMF C7 H12 O2



CM 5

CRN 79-38-9  
 CMF C2 Cl F3



L30 ANSWER 25 OF 25 HCPLUS COPYRIGHT 2002 ACS  
 AN 1993:519612 HCPLUS

DN 119:119612

TI Coating **compositions** comprising an anhydride-containing polymer and a polymer having a larger concentration of epoxy groups near one end of the chain than in the middle

IN Harper, Lee R.; McDonnell, Gayann S.

PA du Pont de Nemours, E. I., and Co., USA

SO U.S., 11 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM C08L035-00

NCL 525207000

CC 42-7 (Coatings, Inks, and Related Products)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5206295	A	19930427	US 1991-660087	19910225

AB Compns., useful for humidity- and weather-resistant coatings for vehicles, contain a polymer with wt.-av. mol. wt. 2000-50,000 having .gtoreq.2 reactive anhydride groups and a polymer having .gtoreq.2 epoxy groups manufd. by group-transfer polymn. so that the majority of the epoxy groups are at 1 end of the polymer chain. Thus, a 57.67% solids compn. contg. dehydrated Bu acrylate-Bu methacrylate-itaconic acid-styrene copolymer, methylhexahydrophthalic anhydride, UV absorber, hindered amine light stabilizer, Resiflow S, skewed glycidyl methacrylate-iso-Bu methacrylate-1-(2-trimethylsiloxyethoxy)-1-trimethylsiloxy-2-methylpropene copolymer, CY 184 (diglycidyl ester), DY 025 (glycidyl ether), epoxysilane, catalyst, and solvent was sprayed on a waterborne pigmented basecoat and dried at room temp. to give a glossy, humidity-resistant clear layer with tack-free time 2.5 h and Persoz hardness 56 and 67 after 3 and 7 days drying, resp.

ST humidity resistance clear top coating; epoxysilane room temp curable coating; diglycidyl ester room temp curable coating; glycidyl methacrylate copolymer coating; styrene acrylic coating room temp curable; methacrylate copolymer room temp curable coating; itaconic acid copolymer coating; room temp curable acrylic coating; vehicle coating acrylic

IT Polymerization  
(group-transfer, in manuf. of acrylic polymers with skewed content of epoxy groups, for room-temp.-curable coatings)

IT Coating materials  
(room-temp.-curable, weather-resistant, contg. anhydride acrylic polymers and epoxy acrylic polymers, for vehicles)

IT 149513-92-8P 149539-40-2P 149544-06-9P  
149544-07-0P  
RL: PREP (Preparation)  
(manuf. of, as humidity- and weather-resistant room-temp.-curable coatings for vehicles)

IT 30231-50-6DP, Butyl acrylate-itaconic acid-methyl methacrylate copolymer, dehydrated 109206-07-7DP, Butyl acrylate-butyl methacrylate-itaconic acid-styrene copolymer, dehydrated  
RL: PREP (Preparation)  
(manuf. of, for room-temp.-curable coatings contg. epoxy group-contg. polymers)

IT 124993-75-5P  
RL: PREP (Preparation)  
(manuf. of, with epoxy group concn. skewed to one end of polymer chain, by group-transfer polymn., for room-temp.-curable coatings)

IT 149513-92-8P 149539-40-2P 149544-06-9P  
149544-07-0P  
RL: PREP (Preparation)  
(manuf. of, as humidity- and weather-resistant room-temp.-curable coatings for vehicles)

RN 149513-92-8 HCPLUS

CN D-Glucitol, tetrakis-O-(oxiranylmethyl)-, polymer with Araldite DY 025, bis(oxiranylmethyl) 1,2-cyclohexanedicarboxylate, butyl 2-methyl-2-propenoate, butyl 2-propenoate, ethenylbenzene, methylenebutanedioic acid, 2-methylpropyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 2,2,9,9-tetramethyl-4-(1-methylethylidene)-3,5,8-trioxa-2,9-disiladecane (9CI) (CA INDEX NAME)

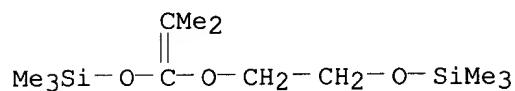
CM 1

CRN 123938-66-9  
CMF Unspecified  
CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

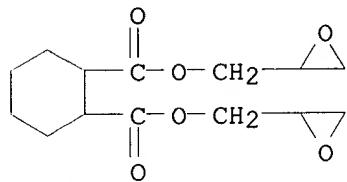
CM 2

CRN 85248-36-8  
CMF C12 H28 O3 Si2



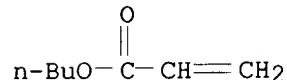
CM 3

CRN 5493-45-8  
CMF C14 H20 O6



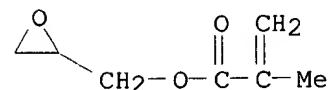
CM 4

CRN 141-32-2  
CMF C7 H12 O2



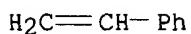
CM 5

CRN 106-91-2  
CMF C7 H10 O3



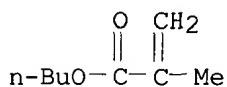
CM 6

CRN 100-42-5  
CMF C8 H8



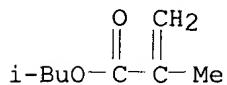
CM 7

CRN 97-88-1  
CMF C<sub>8</sub> H<sub>14</sub> O<sub>2</sub>



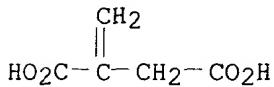
CM 8

CRN 97-86-9  
CMF C<sub>8</sub> H<sub>14</sub> O<sub>2</sub>



CM 9

CRN 97-65-4  
CMF C<sub>5</sub> H<sub>6</sub> O<sub>4</sub>

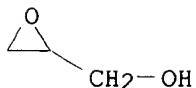


CM 10

CRN 64055-71-6  
CMF C<sub>18</sub> H<sub>30</sub> O<sub>10</sub>  
CCI IDS

CM 11

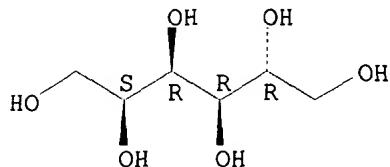
CRN 556-52-5  
CMF C<sub>3</sub> H<sub>6</sub> O<sub>2</sub>



CM 12

CRN 50-70-4  
 CMF C6 H14 O6

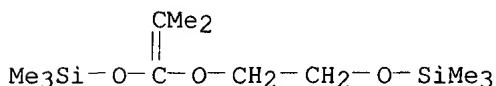
Absolute stereochemistry.



RN 149539-40-2 HCAPLUS  
 CN 1,2-Cyclohexanedicarboxylic acid, bis(oxiranylmethyl) ester, polymer with butyl 2-methyl-2-propenoate, butyl 2-propenoate, ethenylbenzene, methylenebutanedioic acid, 2-methylpropyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 2,2,9,9-tetramethyl-4-(1-methylethylidene)-3,5,8-trioxa-2,9-disiladecane (9CI) (CA INDEX NAME)

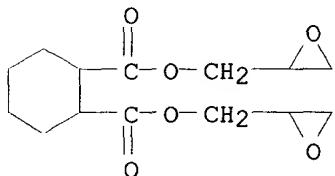
CM 1

CRN 85248-36-8  
 CMF C12 H28 O3 Si2



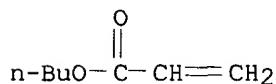
CM 2

CRN 5493-45-8  
 CMF C14 H20 O6

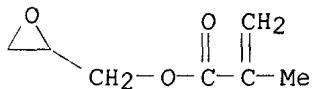


CM 3

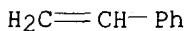
CRN 141-32-2  
 CMF C7 H12 O2



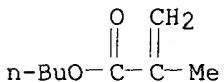
CM 4

CRN 106-91-2  
CMF C7 H10 O3

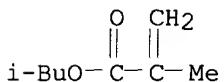
CM 5

CRN 100-42-5  
CMF C8 H8

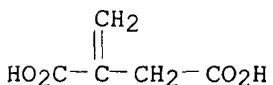
CM 6

CRN 97-88-1  
CMF C8 H14 O2

CM 7

CRN 97-86-9  
CMF C8 H14 O2

CM 8

CRN 97-65-4  
CMF C5 H6 O4

RN 149544-06-9 HCAPLUS  
 CN 1,2-Cyclohexanedicarboxylic acid, bis(oxiranylmethyl) ester, polymer with

KATHLEEN FULLER EIC 1700/LAW LIBRARY 308-4290

Araldite DY 025, butyl 2-methyl-2-propenoate, butyl 2-propenoate, ethenylbenzene, hexahydromethyl-1,3-isobenzofurandione, methylenebutanedioic acid, 2-methylpropyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate, 2,2,9,9-tetramethyl-4-(1-methylethylidene)-3,5,8-trioxa-2,9-disiladecane and trimethoxy[3-(oxiranylmethoxy)propyl]silane (9CI) (CA INDEX NAME)

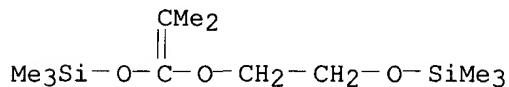
CM 1

CRN 123938-66-9  
 CMF Unspecified  
 CCI MAN

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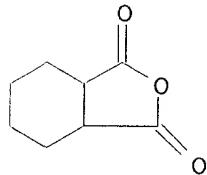
CM 2

CRN 85248-36-8  
 CMF C12 H28 O3 Si2



CM 3

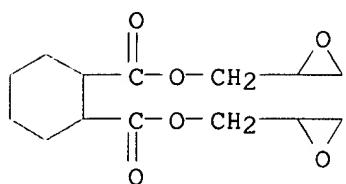
CRN 25550-51-0  
 CMF C9 H12 O3  
 CCI IDS



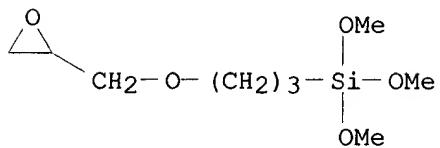
D1-Me

CM 4

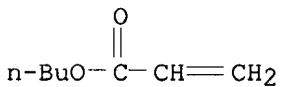
CRN 5493-45-8  
 CMF C14 H20 O6



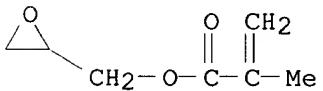
CM 5

CRN 2530-83-8  
CMF C9 H20 O5 Si

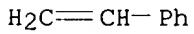
CM 6

CRN 141-32-2  
CMF C7 H12 O2

CM 7

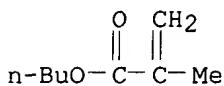
CRN 106-91-2  
CMF C7 H10 O3

CM 8

CRN 100-42-5  
CMF C8 H8

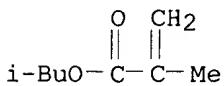
CM 9

CRN 97-88-1  
 CMF C8 H14 O2



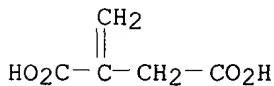
CM 10

CRN 97-86-9  
 CMF C8 H14 O2



CM 11

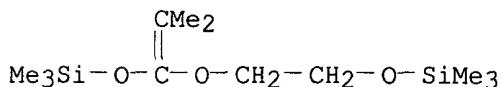
CRN 97-65-4  
 CMF C5 H6 O4



RN 149544-07-0 HCPLUS  
 CN 1,2-Cyclohexanedicarboxylic acid, bis(oxiranylmethyl) ester, polymer with butyl 2-methyl-2-propenoate, butyl 2-propenoate, ethenylbenzene, hexahydromethyl-1,3-isobenzofurandione, methylenebutanedioic acid, 2-methylpropyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 2,2,9,9-tetramethyl-4-(1-methylethylidene)-3,5,8-trioxa-2,9-disiladecane (9CI) (CA INDEX NAME)

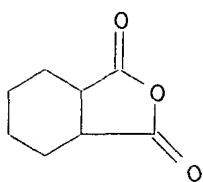
CM 1

CRN 85248-36-8  
 CMF C12 H28 O3 Si2



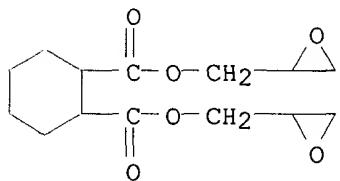
CM 2

CRN 25550-51-0  
 CMF C9 H12 O3  
 CCI IDS

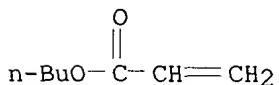


D1-Me

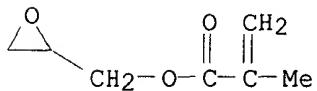
CM 3

CRN 5493-45-8  
CMF C14 H20 O6

CM 4

CRN 141-32-2  
CMF C7 H12 O2

CM 5

CRN 106-91-2  
CMF C7 H10 O3

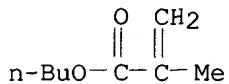
CM 6

CRN 100-42-5  
CMF C8 H8

H<sub>2</sub>C=CH-Ph

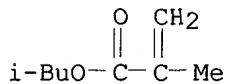
CM 7

CRN 97-88-1  
CMF C<sub>8</sub> H<sub>14</sub> O<sub>2</sub>



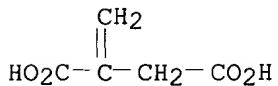
CM 8

CRN 97-86-9  
CMF C<sub>8</sub> H<sub>14</sub> O<sub>2</sub>



CM 9

CRN 97-65-4  
CMF C<sub>5</sub> H<sub>6</sub> O<sub>4</sub>



IT 124993-75-5P

RL: PREP (Preparation)

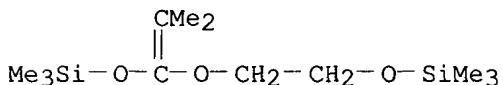
(manuf. of, with epoxy group concn. skewed to one end of polymer chain,  
by group-transfer polymn., for room-temp.-curable coatings)

RN 124993-75-5 HCAPLUS

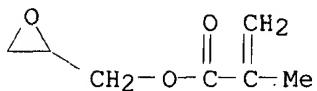
CN 2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with  
oxiranylmethyl 2-methyl-2-propenoate and 2,2,9,9-tetramethyl-4-(1-  
methyl ethylidene)-3,5,8-trioxa-2,9-disiladecane (9CI) (CA INDEX NAME)

CM 1

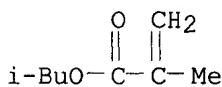
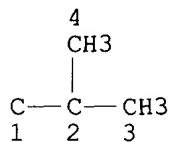
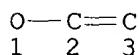
CRN 85248-36-8  
CMF C<sub>12</sub> H<sub>28</sub> O<sub>3</sub> Si<sub>2</sub>



CM 2

CRN 106-91-2  
CMF C7 H10 O3

CM 3

CRN 97-86-9  
CMF C8 H14 O2=> D QUE  
L7 STR*Text search*NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITEDGRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 4STEREO ATTRIBUTES: NONE  
L8 STRNODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITEDGRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 3STEREO ATTRIBUTES: NONE  
L11 STR

CC 42-10 (Coatings, Inks, and Related Products)

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2002028303	A1	20020307	US 2001-940153	<u>20010827</u>
PRAI US 2000-569283	A2	20000512		

AB The title **compns.** comprise an **alkenyl ether**-functional **polyisobutylene**, a cationic **photoinitiator**, and a miscible reactive diluent selected from di and monofunctional vinyl ether compds., epoxy functional compds., or acrylate compds. R8Xb, where R8 is a nonsilicon contg. org. group, X is an org. group contg. .gt;req.1 acrylate functional group, and b = 2-4. The **radiation curable compns.** exhibit a low cure energy, have a high moisture vapor barrier, high damping characteristics, and a high refractive index, and provide a barrier to corrosive vapors and have maintained or enhanced modulus, tensile strength, and toughness.

ST **alkenyl ether functional polyisobutylene** **radiation curable** coating; vinyl ether reactive diluent; acrylate reactive diluent; epoxy compd reactive diluent

IT Acids, uses  
Group IIIA element compounds  
RL: CAT (Catalyst use); USES (Uses)  
(boronic acids, onium salts; **radiation curable compns.** contg. **alkenyl ether** functional **polyisobutylenes**)

IT Polymerization catalysts  
(cationic, photochem.; **radiation curable compns.** contg. **alkenyl ether** functional **polyisobutylenes**)

IT Sulfonic acids, uses  
RL: CAT (Catalyst use); USES (Uses)  
(onium salts; **radiation curable compns.** contg. **alkenyl ether** functional **polyisobutylenes**)

IT Onium compounds  
RL: CAT (Catalyst use); USES (Uses)  
(**radiation curable compns.** contg. **alkenyl ether** functional **polyisobutylenes**)

IT Coating materials  
(**radiation-curable**; **radiation curable compns.** contg. **alkenyl ether** functional **polyisobutylenes**)

IT 82184-29-0, Bis(dodecylphenyl) iodonium hexafluoroantimonate  
110879-14-6, Bis(dodecyl phenyl) iodonium hexafluoroarsenate  
RL: CAT (Catalyst use); USES (Uses)  
(**radiation curable compns.** contg. **alkenyl ether** functional **polyisobutylenes**)

IT 42978-84-7DP, Hydroxybutyl vinyl ether, reaction products with allyl-terminated **polyisobutylene** and alkoxy **hydrosilanes**  
137407-65-9DP, reaction products with allyl-terminated **polyisobutylene** and hydroxybutyl vinyl ether 259199-55-8DP,  
Epion 200A, reaction products with alkoxy **hydrosilanes** and hydroxybutyl vinyl ether  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(**radiation curable compns.** contg. **alkenyl ether** functional **polyisobutylenes**)

IT 103-11-7, 2-Ethylhexyl acrylate 103-44-6, 2-Ethylhexyl vinyl ether  
140-88-5, Ethyl acrylate 141-32-2, Butyl acrylate 693-63-0 764-78-3,  
Ethylene glycol divinyl ether 764-99-8, Diethyleneglycol divinyl ether

765-12-8, Triethylene glycol divinyl ether 765-14-0, Dodecyl vinyl ether  
 925-60-0, Propyl acrylate 929-37-3, Diethyleneglycol monovinyl ether  
 930-02-9, Octadecyl vinyl ether 1070-70-8 1330-61-6, Isodecyl acrylate  
 1663-39-4, tert.-Butyl acrylate 1680-21-3, Triethylene glycol diacrylate  
 2156-97-0, Dodecyl acrylate 2223-82-7, Neopentyl glycol diacrylate  
 2274-11-5, Ethylene glycol diacrylate 2399-48-6, Tetrahydrofurfuryl  
 acrylate 2461-18-9, Dodecyl glycidyl ether 2499-95-8, Hexyl acrylate  
 3066-71-5, Cyclohexyl acrylate 3076-04-8, Tridecyl acrylate 3891-33-6,  
 Butanediol divinyl ether 4074-88-8, Diethylene glycol diacrylate  
 4813-57-4, Stearyl acrylate 5888-33-5, Isobornyl acrylate 7383-26-8,  
 tert.-Amyl acrylate 13048-33-4, SR238 15625-89-5, Trimethylolpropane  
 tri acrylate 19763-13-4, 1,6-Hexanediol divinyl ether 29590-42-9,  
 Isooctyl acrylate 38954-75-5, Tetradecyl glycidyl ether 48145-04-6,  
 2-Phenoxyethyl acrylate 50974-47-5, Ethoxylated nonyl phenol acrylate  
 52277-33-5, Polytetrahydrofuran diacrylate 64401-02-1 84195-74-4  
 93365-33-4 124452-51-3, Cyclohexane dimethanol diacrylate 130668-21-2,  
 Cyclohexanedimethanol divinyl ether 131132-77-9 133780-14-0  
 135876-32-3 135876-34-5 135876-36-7 135948-66-2 135948-67-3  
 143458-13-3 164978-32-9

RL: TEM (Technical or engineered material use); USES (Uses)  
 (radiation curable compns. contg.  
 alkenyl ether functional polyisobutylenes)

L39 ANSWER 2 OF 9 HCPLUS COPYRIGHT 2002 ACS  
 AN 2001:851267 HCPLUS  
 DN 136:7764  
 TI Radiation curable compositions containing  
 alkenyl ether functional polyisobutylenes  
 IN Bahadur, Maneesh; Perz, Susan; Suzuki, Toshio  
 PA Dow Corning Corporation, USA  
 SO PCT Int. Appl., 27 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C08F290-04  
 ICS C09D004-00; C09D004-06  
 CC 42-10 (Coatings, Inks, and Related Products)  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001088003	A1	20011122	WO 2001-US12543	20010417
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

PRAI US 2000-569283 A 20000512

AB This invention relates to radiation curable  
 compns. comprising an alkenyl ether functional  
 polyisobutylene, a cationic photoinitiator, and a  
 miscible reactive diluent selected from specified org. vinyl ether compds.  
 or compds. having the formula R8Xb, wherein R8 is a non-silicon contg.  
 org. group, X is an org. group contg. at-least one acrylate functional  
 group, and b has a value of 1-3. The radiation curable  
 compns. exhibit a low cure energy, have a high moisture vapor  
 barrier, high damping characteristics, and a high refractive index, and

provide a barrier to corrosive vapors and have maintained or enhanced modulus, tensile strength, and toughness.

ST alkenyl ether functional polyisobutylene  
radiation curable coating; vinyl ether reactive diluent

IT Acids, uses  
Group IIIA element compounds  
RL: CAT (Catalyst use); USES (Uses)  
(boronic acids, onium salts; radiation curable compns. contg. alkenyl ether functional polyisobutylenes)

IT Polymerization catalysts  
(cationic, photochem.; radiation curable compns. contg. alkenyl ether functional polyisobutylenes)

IT Sulfonic acids, uses  
RL: CAT (Catalyst use); USES (Uses)  
(onium salts; radiation curable compns. contg. alkenyl ether functional polyisobutylenes)

IT Onium compounds  
RL: CAT (Catalyst use); USES (Uses)  
(radiation curable compns. contg. alkenyl ether functional polyisobutylenes)

IT Coating materials  
(radiation-curable; radiation curable compns. contg. alkenyl ether functional polyisobutylenes)

IT 82184-29-0, Bis(dodecylphenyl) iodoniumhexafluoroantimonate 110879-14-6,  
Bis(dodecyl phenyl) iodonium hexafluoroarsenate  
RL: CAT (Catalyst use); USES (Uses)  
(radiation curable compns. contg. alkenyl ether functional polyisobutylenes)

IT 42978-84-7DP, Hydroxybutyl vinyl ether, reaction products with allyl-terminated polyisobutylene and alkoxy hydrosilanes  
137407-65-9DP, reaction products with allyl-terminated polyisobutylene and hydroxybutyl vinyl ether 259199-55-8DP,  
Epion 200A, reaction products with alkoxy hydrosilanes and hydroxybutyl vinyl ether  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(radiation curable compns. contg. alkenyl ether functional polyisobutylenes)

IT 3891-33-6, Butanediol divinyl ether 13048-33-4, SR238 19763-13-4,  
1,6-Hexanediol divinyl ether 130668-21-2, Cyclohexanedimethanol divinyl ether  
RL: TEM (Technical or engineered material use); USES (Uses)  
(radiation curable compns. contg. alkenyl ether functional polyisobutylenes)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Dow Corning; EP 1004605 A 2000 HCPLUS  
(2) Glover, S; US 5594042 A 1997 HCPLUS  
(3) Suzuki, T; US 6054549 A 2000 HCPLUS

L39 ANSWER 3 OF 9 HCPLUS COPYRIGHT 2002 ACS  
AN 2001:598090 HCPLUS  
DN 135:167551  
TI Curable composition comprising hydrosilylizable alkenyl-containing polymer and conductive carbon black for conductive roller and drum  
IN Manabe, Takao; Kamite, Jun; Tsunemi, Hidenari

PA Kaneka Corp., Japan  
 SO PCT Int. Appl., 70 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 IC ICM C08L101-00  
 ICS C08K003-00; C08K005-00; C08K009-00; G03G021-00; G03G015-02;  
 G03G015-16; G03G015-08; G03G015-20; F16C013-00  
 CC 37-6 (Plastics Manufacture and Processing)  
 Section cross-reference(s): 39, 74

## FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001059010	A1	20010816	WO 2001-JP823	20010206
	W: JP, KR, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
PRAI	JP 2000-29141	A	20000207		
	JP 2000-31698	A	20000209		
	JP 2000-31699	A	20000209		
	JP 2000-62075	A	20000307		
	JP 2000-140471	A	20000512		
	JP 2000-147128	A	20000518		
	JP 2000-340324	A	20001108		

AB The compn. comprises (A) a polymer having .gtoreq.1 hydrosilylizable alkenyl group/mol, (B) a compd. having .gtoreq.2 hydrosilyl groups/mol., (C) a hydrosilylation catalyst, (D) carbon black surface-treated with E and F, (E) .gtoreq.1 compd. selected from epoxy-contg. compds., acid anhydrides and esters, and (F) an organotitanium compd. and/or an organoaluminum compd. The conductive material obtained by heat-curing the above compn. has regulated cond. Thus, 100 g EP 400A (allyl-terminated **polyisobutylene**) was mixed with CR 100 (polyorganohydrogensiloxane) 5.3, carbon black 10, A 186 (epoxy-contg. silane coupling agent) 1, tetra(n-butoxy)titanium 0.2, 1-ethyl-2-cyclohexanol 0.25, PAO 5006 (plasticizer) 50, Mark AO 50 (antioxidant) 1 g and bis(1,3-divinyl-1,1,3,3-tetramethyldisiloxane) platinum complex catalyst (Pt content 3%) 57 .mu.L, molded and cured at 150.degree. for 30 min to give a sheet showing vol. resistivity 1 x 10<sup>16</sup> .OMEGA.-cm.

ST hydrosilylizable alkenyl polymer compn conductive roller; carbon black surface treated conductive compn; storage stability curable conductive compn drum; allyl terminated **polyisobutylene** hydrosilylation curable compn; tetramethyldisiloxane platinum complex hydrosilylation catalyst

IT Carbon black, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (Regal 330R; curable compn. comprising hydrosilylizable alkenyl-contg. polymer and conductive carbon black for conductive roller and drum)

IT Epoxy resins, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (coupling agents; curable compn. comprising hydrosilylizable alkenyl-contg. polymer and conductive carbon black for conductive roller and drum)

IT Coupling agents  
 Hydrosilylation catalysts  
 (curable compn. comprising hydrosilylizable alkenyl-contg. polymer and conductive carbon black for conductive roller and drum)

IT Polysiloxanes, preparation  
 RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); PREP (Preparation); USES (Uses)

(curable compn. comprising hydrosilylizable alkenyl-contg. polymer and conductive carbon black for conductive roller and drum)

IT Electrophotographic **photoconductors (photoreceptors)**  
(drums; **curable** compn. comprising hydrosilylizable alkenyl-contg. polymer and conductive carbon black for conductive roller and drum)

IT Polyoxyalkylenes, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(ethers, allyl ether, polymers with maleic anhydride and styrene, coupling agent; curable compn. comprising hydrosilylizable alkenyl-contg. polymer and conductive carbon black for conductive roller and drum)

IT Polysiloxanes, preparation  
RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); PREP (Preparation); USES (Uses)  
(hydrogen, ACX 004C, polymers with alkenyl-contg. polymers; curable compn. comprising hydrosilylizable alkenyl-contg. polymer and conductive carbon black for conductive roller and drum)

IT Electrophotographic apparatus  
(**photoconductor** drums; **curable** compn. comprising hydrosilylizable alkenyl-contg. polymer and conductive carbon black for conductive roller and drum)

IT Polysiloxanes, preparation  
RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); PREP (Preparation); USES (Uses)  
(polyoxyalkylene-; curable compn. comprising hydrosilylizable alkenyl-contg. polymer and conductive carbon black for conductive roller and drum)

IT Polyoxyalkylenes, preparation  
RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); PREP (Preparation); USES (Uses)  
(polysiloxane-; curable compn. comprising hydrosilylizable alkenyl-contg. polymer and conductive carbon black for conductive roller and drum)

IT Electrophotographic apparatus  
(rollers; curable compn. comprising hydrosilylizable alkenyl-contg. polymer and conductive carbon black for conductive roller and drum)

IT 37273-13-5DP, ACX 004N, polymers with polyorganohydrogensiloxanes  
RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); PREP (Preparation); USES (Uses)  
(ACX 004N; curable compn. comprising hydrosilylizable alkenyl-contg. polymer and conductive carbon black for conductive roller and drum)

IT 100-42-5D, Styrene, copolymers with maleic anhydride and allyl-terminated polyoxyalkylene 108-31-6D, Maleic anhydride, copolymers with styrene and allyl-terminated polyoxyalkylene 2530-83-8, A 187 3388-04-3, A 186 5593-70-4, Tetra(n-butoxy)titanium 17927-72-9, T 50 25085-98-7, Epikote 171 25085-99-8, Epikote 825 26403-62-3 61417-49-0, KR TTS 84431-92-5, AL M 104709-47-9, YED 111 135151-14-3, CY 177 165245-81-8, TOG 208054-96-0, YED 216 354117-65-0, Malialim AWS 0851 354117-66-1, Malialim AAB 0851 354118-07-3, Epiol BE 200 354118-32-4, Epiol P 200  
RL: MOA (Modifier or additive use); USES (Uses)  
(coupling agent; curable compn. comprising hydrosilylizable alkenyl-contg. polymer and conductive carbon black for conductive roller and drum)

IT 81032-58-8, Bis(1,3-divinyl-1,1,3,3-tetramethyldisiloxane) platinum complex  
RL: CAT (Catalyst use); USES (Uses)  
(curable compn. comprising hydrosilylizable alkenyl-contg. polymer and conductive carbon black for conductive roller and drum)

IT 351530-98-8P 353293-95-5P  
 RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); PREP (Preparation); USES (Uses)  
 (curable compn. comprising hydrosilylizable alkenyl-contg. polymer and conductive carbon black for conductive roller and drum)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Kanegafuchi Chem Ind Co Ltd; JP 09296118 A 1997 HCPLUS
- (2) Kanegafuchi Chem Ind Co Ltd; JP 09316293 A 1997 HCPLUS
- (3) Kanegafuchi Chem Ind Co Ltd; JP 10292102 A 1998 HCPLUS
- (4) Mitsubishi Chemical Corporation; JP 09124969 A 1997 HCPLUS

L39 ANSWER 4 OF 9 HCPLUS COPYRIGHT 2002 ACS

AN 2000:426961 HCPLUS

DN 133:60196

TI Moisture- and **photo-curable** sealing compositions with good moisture impermeability

IN Nakajima, Kunihiko; Hara, Osamu

PA Three Bond Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09K003-10

ICS C08F002-48; C08F299-00

CC 42-11 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000178535	A2	20000627	JP 1998-354775	19981214
AB	The compns., useful for elec. parts, etc., comprise (a) modified polyisobutylene (I) contg. (meth)acrylic groups and hydrolyzable Si groups, (b) photoinitiators, and (c) moisture curing catalysts, where modified I is prep'd. from I contg. hydrolyzable Si groups and OH-contg. (meth)acrylates. Thus, 400 g methylidialkoxysilane -terminated I (Epion 303S) was treated with 60 g tetramethylolmethane triacrylate (NK Ester A-TMM 3), mixed with 2,2-diethoxyacetophenone, dibutyltin dimethoxide, and a plasticizer, and cured to give a test piece showing moisture permeability 2 g/m <sup>2</sup> -24-h for 72 h.				
ST	moisture <b>photo curable</b> sealant water impermeability; hydrolyzable silane polyisobutylene acrylate sealant				
IT	Isobutylene rubber RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (cured; moisture- and <b>photo-curable</b> sealing compns. with good moisture impermeability)				
IT	Sealing compositions (moisture-curable; moisture- and <b>photo-curable</b> sealing compns. with good moisture impermeability)				
IT	Sealing compositions (photocurable; moisture- and <b>photo-curable</b> sealing compns. with good moisture impermeability)				
IT	Water-resistant materials Water-resistant materials (sealants; moisture- and <b>photo-curable</b> sealing compns. with good moisture impermeability)				
IT	Sealing compositions Sealing compositions				

(water-resistant; moisture- and **photo-curable**  
sealing **compns.** with good moisture impermeability)

IT 1709-71-3DP, NK Ester 701A, reaction products with **alkoxysilane**-terminated **polyisobutylene** 3524-68-3DP, NK Ester A-TMM 3, reaction products with **alkoxysilane**-terminated **polyisobutylene** 9003-27-4DP, **Polyisobutylene**, **methyldialkoxysilane**-terminated, reaction products with OH-contg. acrylate 223537-47-1DP, Epion EP 103S, reaction products with OH-contg. acrylate 223537-50-6DP, Epion EP 505S, reaction products with OH-contg. acrylate 277317-37-0DP, Epion 303S, reaction products with OH-contg. acrylate  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(cured, rubber; moisture- and **photo-curable** sealing **compns.** with good moisture impermeability)

IT 9003-27-4P  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(**isobutylene** rubber, **cured**; moisture- and **photo-curable** sealing **compns.** with good moisture impermeability)

L39 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2002 ACS  
AN 2000:362655 HCAPLUS  
DN 133:5949  
TI **Radiation curable compositions containing alkenyl ether functional polyisobutylenes**  
IN Bahadur, Maneesh; Suzuki, Toshio  
PA Dow Corning Asia, Ltd., Japan; Dow Corning Corporation  
SO U.S., 11 pp.  
CODEN: USXXAM  
DT Patent  
LA English  
IC ICM C08J003-28  
      ICS C08J007-18; C08F002-48  
NCL 522025000  
CC 42-10 (Coatings, Inks, and Related Products)  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6069185	A	20000530	US 1998-199261	19981125
	EP 1004605	A1	20000531	EP 1999-309151	19991117
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2000159848	A2	20000613	JP 1999-332929	19991124
PRAI	US 1998-199261	A	19981125		
AB	A <b>comprn.</b> having low cure energy and good moisture vapor barrier, damping characteristics, refractive index, for providing a barrier to corrosive vapors comprises an <b>alkenyl ether</b> functional <b>polyisobutylene</b> , a cationic photoinitiator, a free radical photoinitiator, and an <b>alkenyl ether</b> compd. which is free of <b>isobutylene</b> units and optionally an alkylphenol or hydrocarbon silicone <b>alkenyl ether</b> compds. Thus, a polymer was prep'd. from 50 g Epion 200A (allyl telechelic <b>polyisobutylene</b> ) in 150 mL heptane treating with 1.10 equiv/allyl group <b>trichlorosilane</b> in presence of 1x10-4 equiv/allyl group Pt vinylsiloxane at 70.degree., cooling and adding 15 g triethylamine and 15 mL 4-hydroxybutyl vinyl ether.				
ST	<b>polyisobutylene alkenyl ether coating</b> barrier radiation crosslinking; hydroxybutyl vinyl ether deriv				

IT **polyisobutylene** manuf  
 Coating materials  
 (UV-curable; radiation curable  
 compn. contg. alkenyl ether  
**polyisobutylenes** for providing barrier to corrosive vapors)

IT Sulfonic acids, uses  
 RL: CAT (Catalyst use); USES (Uses)  
 (alkanesulfonic, fluoro; radiation curable  
 compn. contg. alkenyl ether  
**polyisobutylenes** for providing barrier to corrosive vapors)

IT Polysiloxanes, uses  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (alkenyl ether, polymers with  
**polyisobutylene** and vinyl ether; radiation  
 curable compn. contg. alkenyl ether  
**polyisobutylenes** for providing barrier to corrosive vapors)

IT Phenols, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (alkyl; radiation curable compn. contg.  
**alkenyl ether polyisobutylenes** for  
 providing barrier to corrosive vapors)

IT Sulfonic acids, uses  
 RL: CAT (Catalyst use); USES (Uses)  
 (arenesulfonic; radiation curable compn.  
 contg. alkenyl ether **polyisobutylenes** for  
 providing barrier to corrosive vapors)

IT Acids, uses  
 Acids, uses  
 Group IIIA element compounds  
 Group IIIA element compounds  
 RL: CAT (Catalyst use); USES (Uses)  
 (boronic acids, onium salts; radiation curable  
 compn. contg. alkenyl ether  
**polyisobutylenes** for providing barrier to corrosive vapors)

IT Polymerization catalysts  
 (cationic, photochem.; radiation curable  
 compn. contg. alkenyl ether  
**polyisobutylenes** for providing barrier to corrosive vapors)

IT Ethers, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (glycidyl, alkyl; radiation curable compn.  
 . contg. alkenyl ether **polyisobutylenes**  
 for providing barrier to corrosive vapors)

IT Sulfonic acids, uses  
 RL: CAT (Catalyst use); USES (Uses)  
 (onium salts; radiation curable compn.  
 contg. alkenyl ether **polyisobutylenes** for  
 providing barrier to corrosive vapors)

IT Hydrosilylation  
 Light  
 UV radiation  
 (radiation curable compn. contg.  
**alkenyl ether polyisobutylenes** for  
 providing barrier to corrosive vapors)

IT Onium compounds  
 RL: CAT (Catalyst use); USES (Uses)  
 (radiation curable compn. contg.  
**alkenyl ether polyisobutylenes** for  
 providing barrier to corrosive vapors)

IT Polymerization catalysts  
 (radical; **radiation curable compn.** contg.  
**alkenyl ether polyisobutylenes** for  
 providing barrier to corrosive vapors)

IT Crosslinking  
 (radiochem.; **radiation curable compn.**  
 contg. **alkenyl ether polyisobutylenes** for  
 providing barrier to corrosive vapors)

IT 7473-98-5, Darocur 1173  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (Darocur 1173; **radiation curable compn.**  
 contg. **alkenyl ether polyisobutylenes** for  
 providing barrier to corrosive vapors)

IT 546-68-9, Tyzor TPT  
 RL: CAT (Catalyst use); USES (Uses)  
 (Tyzor TPT; **radiation curable compn.**  
 contg. **alkenyl ether polyisobutylenes** for  
 providing barrier to corrosive vapors)

IT 9003-27-4DP, **Polyisobutylene**, vinyl ethers  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (allyl- functional, Epion 200A; **radiation curable**  
**compn.** contg. **alkenyl ether**  
**polyisobutylenes** for providing barrier to corrosive vapors)

IT 11057-89-9, Platinum vinylsiloxane 18155-21-0, Sulfonium 37181-39-8,  
 Triflate 43413-76-9, Iodonium 71786-70-4, Bis(4-dodecylphenyl)  
 iodonium hexafluoroantimonate 110879-14-6, Bis(dodecylphenyl)iodonium  
 hexafluoroarsenate  
 RL: CAT (Catalyst use); USES (Uses)  
 (**radiation curable compn.** contg.  
**alkenyl ether polyisobutylenes** for  
 providing barrier to corrosive vapors)

IT 259199-55-8DP, Epion 200A, reaction products with hydroxybutyl vinyl ether  
 and **trichlorosilane**  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (**radiation curable compn.** contg.  
**alkenyl ether polyisobutylenes** for  
 providing barrier to corrosive vapors)

IT 17832-28-9DP, 4-Hydroxybutyl vinyl ether, reaction products with  
 allyl-functional **polyisobutylene** and **trichlorosilane**  
 57758-90-4DP, Trimethylolpropane trivinyl ether, reaction products with  
 allyl-functional **polyisobutylene** and hydroxybutyl vinyl ether  
 270571-49-8P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (**radiation curable compn.** contg.  
**alkenyl ether polyisobutylenes** for  
 providing barrier to corrosive vapors)

IT 123-01-3D, Dodecylbenzene, linear alkyl  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (**radiation curable compn.** contg.  
**alkenyl ether polyisobutylenes** for  
 providing barrier to corrosive vapors)

IT 75-54-7, Methyl **dichlorosilane** 629-73-2, 1-Hexadecene  
 10025-78-2D, **Trichlorosilane**, reaction products with  
 allyl-functional **polyisobutylene** and hydroxybutyl vinyl ether  
 137407-65-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (**radiation curable compn.** contg.  
**alkenyl ether polyisobutylenes** for  
 providing barrier to corrosive vapors)

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; WO 9104992 1989 HCAPLUS
- (2) Anon; EP 462389 1991 HCAPLUS
- (3) Anon; WO 9211295 1991 HCAPLUS
- (4) Anon; EP 562922 1993 HCAPLUS
- (5) Blyler; Chemtech 1987, P680 HCAPLUS
- (6) Brown; US 5270423 1993 HCAPLUS
- (7) Bujanowski; US 5629095 1997 HCAPLUS
- (8) Crivello; US 4617238 1986 HCAPLUS
- (9) Glover; US 5594042 1997 HCAPLUS
- (10) Hitchcock; Agnew Chem Int Ed Engl, 1991, P438
- (11) Iwahara; US 4904732 1990 HCAPLUS
- (12) Kennedy; Journal of Polymer Science:Part A: Polymer Chemistry V28(190), P89
- (13) Kennedy; Polymeric Materials Science and Engineering 1998, V58, P866
- (14) Liao; Polymer Bulletin 1981, V6, P135 HCAPLUS
- (15) Merrill; RadTech North American Proceedings 1992, V1, P77 HCAPLUS
- (16) Saam; US 4808664 1989 HCAPLUS
- (17) Saxena; US 5665823 1997 HCAPLUS

L39 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2002 ACS

AN 2000:271943 HCAPLUS

DN 132:295229

TI Alkenyl ether functional **polyisobutylenes** and methods for the preparation thereof

IN Bahadur, Maneesh; Suzuki, Toshio

PA Dow Corning Asia, Ltd., Japan; Dow Corning Corporation

SO U.S., 9 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM C08G077-38

NCL 528029000

CC 42-10 (Coatings, Inks, and Related Products)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6054549	A	20000425	US 1998-200038	19981125
	EP 1004602	A1	20000531	EP 1999-309264	19991122
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO KR 2000035652	A	20000626	KR 1999-52416	19991124
	JP 2000191722	A2	20000711	JP 1999-332990	19991124
PRAI	US 1998-200038	A	19981125		
AB	A method of making the above polymers useful in <b>radiation-curable</b> coating comprises reacting a mixt. of an alkoxy silyl-functional <b>polyisobutylene</b> polymer or <b>polyisobutylene</b> contg. .gtoreq.1 hydrolyzable group, an alkenyl ether compd., a transesterification catalyst, and a solvent. Thus, 50 g Epion 200A (allyl-terminated <b>polyisobutylene</b> ) in 150 mL heptane was treated with 1.10 equiv/allyl group <b>trichlorosilane</b> in presence of 1x10-4 equiv/allyl group Pt vinylsiloxane at 70.degree. and 15 mL 4-hydroxybutyl vinyl ether.				
ST	<b>polyisobutylene</b> alkenyl ether coating radiation crosslinking; hydroxybutyl vinyl ether deriv <b>polyisobutylene</b> manuf				
IT	Solvents (chlorides and hydrocarbons; prepn. of alkenyl ether functional <b>polyisobutylenes</b> useful in <b>radiation curable</b> coating)				

IT Naphthenic acids, uses  
 RL: CAT (Catalyst use); USES (Uses)  
 (cobalt salts; prepn. of alkenyl ether functional  
**polyisobutylenes** useful in **radiation curable**  
 coating)

IT Hydrosilylation  
 Transesterification catalysts  
 (prepn. of alkenyl ether functional **polyisobutylenes** useful  
 in **radiation curable** coating)

IT Chlorides, uses  
 Hydrocarbons, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (solvents; prepn. of alkenyl ether functional **polyisobutylenes**  
 useful in **radiation curable** coating)

IT Ethers, preparation  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (vinyl; prepn. of alkenyl ether functional **polyisobutylenes**  
 useful in **radiation curable** coating)

IT Naphthenic acids, uses  
 RL: CAT (Catalyst use); USES (Uses)  
 (zinc salts; prepn. of alkenyl ether functional  
**polyisobutylenes** useful in **radiation curable**  
 coating)

IT Naphthenic acids, uses  
 RL: CAT (Catalyst use); USES (Uses)  
 (zirconium salts; prepn. of alkenyl ether functional  
**polyisobutylenes** useful in **radiation curable**  
 coating)

IT 77-58-7, Dibutyltin dilaurate 124-41-4, Sodium methoxide 546-68-9,  
 Tetraisopropyl titanate 557-09-5, Zinc octylate 1067-33-0, Dibutyltin  
 diacetate 3648-18-8, Dioctyltin dilaurate 4288-15-7, Tin octylate  
 4731-77-5, Dibutyltin dioctoate 5593-70-4, Tetrabutyl titanate  
 6700-85-2 11057-89-9 17194-00-2, Barium hydroxide 18312-04-4,  
 Zirconium octylate 30259-83-7 68928-76-7  
 RL: CAT (Catalyst use); USES (Uses)  
 (prepn. of alkenyl ether functional **polyisobutylenes** useful  
 in **radiation curable** coating)

IT 75-54-7, **Methyldichlorosilane** 75-79-6,  
**Methyltrichlorosilane**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of alkenyl ether functional **polyisobutylenes** useful  
 in **radiation curable** coating)

IT 9003-27-4DP, **Polyisobutylene**, vinyl ethers 10025-78-2DP,  
**Trichlorosilane**, reaction products with allyl functional  
**polyisobutylene** and hydroxybutyl vinyl ether 17832-28-9DP,  
4-Hydroxybutyl vinyl ether, reaction products with allyl-functional  
**polyisobutylene** and **trichlorosilane** 259199-55-8DP,  
Epion 200A, reaction products with hydroxybutyl vinyl ether and  
**trichlorosilane**  
RL: IMF (Industrial manufacture); PREP (Preparation)  
 (prepn. of **polyisobutylene** alkenyl ether useful in  
**radiation curable** coating)

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Anon; WO 9104992 1989 HCPLUS  
(2) Anon; EP 462389 1991 HCPLUS  
(3) Anon; WO 9211295 1991 HCPLUS  
(4) Blyler; Chemtech 1987, P680 HCPLUS  
(5) Brown; US 5270423 1993 HCPLUS  
(6) Bujanowski; US 5629095 1997 HCPLUS

- (7) Crivello; US 4617238 1986 HCPLUS
- (8) Glover; US 5594042 1997 HCPLUS
- (9) Hitchcock; Angew Chem Int Ed Engl 1991, P438
- (10) Iwahara; US 4904732 1990 HCPLUS
- (11) Kennedy; Journal of Polymer Science:Part A: Polymer Chemistry 1990, V28, P89
- (12) Kennedy; Polymer Materials Science and Engineering 1998, V58, P866
- (13) Liao; Polymer Bulletin 1981, V6, P135 HCPLUS
- (14) Merrill; Rad Tech North America Proceedings 1992, V1, P77 HCPLUS
- (15) Saam; US 4808664 1989 HCPLUS
- (16) Saxena; US 5665823 1997 HCPLUS

L39 ANSWER 7 OF 9 HCPLUS COPYRIGHT 2002 ACS

AN 1998:466393 HCPLUS

DN 129:123295

TI Filled, addition-curable **compositions** having reduced gassing and increased shelf stability

IN Kalinowski, Robert Edward; Tomalia, Mary Kay

PA Dow Corning Corp., USA

SO Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DT Patent

LA English

IC C08L083-04; C08K007-00; C08K003-34; C08K005-54

CC 37-6 (Plastics Manufacture and Processing)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 850997	A2	19980701	EP 1997-122481	19971219
	EP 850997	A3	20010314		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	AU 9748541	A1	19980625	AU 1997-48541	19971223
	JP 10330629	A2	19981215	JP 1997-355084	19971224

PRAI US 1996-773745 A 19961224

AB The addn. curable **compn.** comprises an org. polymer having on av. at least 1.4 alkenyl groups per mol. (such as allyl-terminated **polyisobutylene**), a crosslinker having on av. at least 1.4 hydrosilyl groups per mol. (such as Me hydrogen siloxane cyclic tetramer and pentamer), a platinum group metal-contg. catalyst, a filler, and a mol. sieve desiccant to decrease gassing and improved the shelf stability.

ST filled Michael reaction curable **compn**; allyl terminated **polyisobutylene** curable filled **compn**; mol sieve desiccant addn curable **compn**; storage stability enhanced addn curable **compn**; gassing prevention addn curable filled **compn**; hydrosilyl cyclosiloxane crosslinker alkenyl polymer; addn curable filled alkenyl polymer **compn**

IT Kaolin, uses

RL: MOA (Modifier or additive use); USES (Uses)  
(Bilt Plate 156; filled, addn.-curable **compns.** contg. unsatd. polymers and hydrosilyl group-contg. crosslinkers having reduced gassing and increased shelf stability)

IT Carbon black, uses

RL: MOA (Modifier or additive use); USES (Uses)  
(C 100; filled, addn.-curable **compns.** contg. unsatd. polymers and hydrosilyl group-contg. crosslinkers having reduced gassing and increased shelf stability)

IT Glass microspheres

RL: MOA (Modifier or additive use); USES (Uses)  
(Extendospheres SL 150; filled, addn.-curable **compns.** contg.

unsatd. polymers and hydrosilyl group-contg. crosslinkers having reduced gassing and increased shelf stability)

IT **Polyethers**, uses  
RL: POF (Polymer in formulation); USES (Uses)  
(**alkenyl** group-contg.; filled, addn.-curable **compns**  
. contg. unsatd. polymers and hydrosilyl group-contg. crosslinkers having reduced gassing and increased shelf stability)

IT Crosslinking agents  
Fillers  
(filled, addn.-curable **compns**. contg. unsatd. polymers and hydrosilyl group-contg. crosslinkers having reduced gassing and increased shelf stability)

IT Cyclosiloxanes  
Polysiloxanes, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(hydrogen; filled, addn.-curable **compns**. contg. unsatd. polymers and hydrosilyl group-contg. crosslinkers having reduced gassing and increased shelf stability)

IT Drying agents  
(mol. sieves; filled, addn.-curable **compns**. contg. unsatd. polymers and hydrosilyl group-contg. crosslinkers having reduced gassing and increased shelf stability)

IT Zeolite 5A  
RL: MOA (Modifier or additive use); USES (Uses)  
(storage stabilizer; filled, addn.-curable **compns**. contg. unsatd. polymers and hydrosilyl group-contg. crosslinkers having reduced gassing and increased shelf stability)

IT Polyesters, uses  
RL: POF (Polymer in formulation); USES (Uses)  
(unsatd.; filled, addn.-curable **compns**. contg. unsatd. polymers and hydrosilyl group-contg. crosslinkers having reduced gassing and increased shelf stability)

IT 471-34-1, Calcium carbonate, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(Atomite SSA 2114; filled, addn.-curable **compns**. contg. unsatd. polymers and hydrosilyl group-contg. crosslinkers having reduced gassing and increased shelf stability)

IT 13983-17-0, Wollastonite  
RL: MOA (Modifier or additive use); USES (Uses)  
(Wollastokup 10; filled, addn.-curable **compns**. contg. unsatd. polymers and hydrosilyl group-contg. crosslinkers having reduced gassing and increased shelf stability)

IT 2370-88-9 6166-86-5, Pentamethylcyclopentasiloxane 14807-96-6, Nytal 200, uses 146701-60-2, Cabosil ts 530 156118-35-3D,  
**Dimethylsilanediol**-hydrogen **methylsilanediol** copolymer,  
trimethylsilyl-terminated 210296-82-5, CS 11 (filler)  
RL: MOA (Modifier or additive use); USES (Uses)  
(filled, addn.-curable **compns**. contg. unsatd. polymers and hydrosilyl group-contg. crosslinkers having reduced gassing and increased shelf stability)

IT 9003-17-2D, Polybutadiene, alkenyl group-contg. 9003-17-2D,  
Polybutadiene, hydrogenated, alkenyl group-contg. 9003-29-6D,  
Polybutylene, alkenyl group-contg. 9003-31-0D, Polyisoprene, alkenyl group-contg. 9003-31-0D, Polyisoprene, hydrogenated, alkenyl group-contg. 9003-55-8D, Butadiene-styrene copolymer, alkenyl group-contg. 9003-55-8D, Butadiene-styrene copolymer, hydrogenated, alkenyl group-contg. 9010-85-9D, **Isobutylene**-isoprene copolymer, alkenyl group-contg. 25038-32-8D, Isoprene-styrene copolymer, alkenyl group-contg. 25038-32-8D, Isoprene-styrene copolymer, hydrogenated, alkenyl group-contg. 26602-62-0D, Butadiene-isoprene-

styrene copolymer, alkenyl group-contg. 26602-62-0D,  
 Butadiene-isoprene-styrene copolymer, hydrogenated, alkenyl group-contg.  
 210235-32-8, Epion Polymer

RL: POF (Polymer in formulation); USES (Uses)

(filled, addn.-curable compns. contg. unsatd. polymers and  
 hydrosilyl group-contg. crosslinkers having reduced gassing and  
 increased shelf stability)

IT 7631-86-9, Silica, uses

RL: MOA (Modifier or additive use); USES (Uses)

(hexamethyldisilazane-treated fumed; filled, addn.-curable  
 compns. contg. unsatd. polymers and hydrosilyl group-contg.  
 crosslinkers having reduced gassing and increased shelf stability)

L39 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2002 ACS

AN 1998:324845 HCAPLUS

DN 129:28720

TI Addition-curable compositions having increased thermal stability

IN Saxena, Anil Kumar; Suzuki, Toshio

PA Dow Corning Corp., USA

SO U.S., 8 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM C08F008-00

NCL 524506000

CC 37-6 (Plastics Manufacture and Processing)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5753743	A	19980519	US 1996-773018	19961224
AB	An addn. curable compn. comprises: (A) 100 parts of an org. polymer having on av. .gtoreq.1.4 alkenyl groups per mol.; (B) an amt. sufficient to cure the compn. of a crosslinker having on av. .gtoreq.2 hydrosilyl groups per mol.; (C) a platinum group metal contg. catalyst in an amt. sufficient to effect curing of the compn.; and (D) 0.1-5 parts of a hindered amine stabilizer selected from Tinuvin 770DF and Chimassorb 944FL. The addn. curable compn. has increased thermal stability after curing. Allyl-functional polyisobutylene was cured with a di-Me, Me H siloxane using a Pt-vinyl siloxane complex catalyst in the presence of one of the above stabilizers.				

ST allyl functional

IT Crosslinking agents

Stabilizing agents

(addn.-curable compns. having increased thermal stability)

IT Polyesters, uses

**Polyethers**, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(alkenyl group-contg.; addn.-curable compns. having increased thermal stability)

IT Amines, uses

RL: MOA (Modifier or additive use); USES (Uses)

(hindered; addn.-curable compns. having increased thermal stability)

IT Polysiloxanes, uses

RL: MOA (Modifier or additive use); USES (Uses)

(hydrogen; addn.-curable compns. having increased thermal stability)

IT Crosslinking catalysts

(platinum group metal; addn.-curable compns. having increased thermal stability)

IT 7440-06-4D, Platinum, vinylsiloxane complex, uses  
 RL: CAT (Catalyst use); USES (Uses)  
 (addn.-curable compns. having increased thermal stability)

IT 52829-07-9, Tinuvin 770DF 71878-19-8, Chimassorb 944FL 156118-35-3D,  
**Dimethylsilanediol-methylsilanediol** copolymer,  
 trimethylsilyl-terminated  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (addn.-curable compns. having increased thermal stability)

IT 9003-17-2D, Polybutadiene, alkenyl group-contg. 9003-17-2D,  
 Polybutadiene, hydrogenated, alkenyl group-contg. 9003-27-4D,  
**Polyisobutylene**, allyl-functional 9003-29-6D, Polybutylene,  
 alkenyl group-contg. 9003-31-0D, Polyisoprene, alkenyl group-contg.  
 9003-31-0D, Polyisoprene, hydrogenated, alkenyl group-contg. 9003-55-8D,  
 Butadiene-styrene copolymer, alkenyl group-contg. 9003-55-8D,  
 Butadiene-styrene copolymer, hydrogenated, alkenyl group-contg.  
 9010-85-9D, **Isobutylene**-isoprene copolymer, alkenyl group-contg.  
 25038-32-8D, Isoprene-styrene copolymer, alkenyl group-contg.  
 25038-32-8D, Isoprene-styrene copolymer, hydrogenated, alkenyl  
 group-contg. 25102-52-7D, Butadiene-isoprene copolymer, alkenyl  
 group-contg. 26602-62-0D, Butadiene-isoprene-styrene copolymer, alkenyl  
 group-contg. 26602-62-0D, Butadiene-isoprene-styrene copolymer,  
 hydrogenated, alkenyl group-contg.  
 RL: POF (Polymer in formulation); TEM (Technical or engineered material  
 use); USES (Uses)  
 (addn.-curable compns. having increased thermal stability)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; JP 2075644 1990
- (2) Iwahara; US 5409995 1995 HCPLUS
- (3) Macosko, C; The Hydrosilylation Cure of Polyisobutene P48

L39 ANSWER 9 OF 9 HCPLUS COPYRIGHT 2002 ACS  
 AN 1992:224815 HCPLUS  
 DN 116:224815  
 TI Transfer recording material using microcapsules with fluorine-containing  
 compounds  
 IN Miyagawa, Masashi; Yaegashi, Hisao; Okuma, Norio; Takenochi, Masanori  
 PA Canon K. K., Japan  
 SO Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM G03F007-004  
 ICS B41M005-26  
 CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other  
 Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03291658	A2	19911220	JP 1990-93231	19900410
AB	In the title material contg. an image-forming element made from microcapsules contg. an inner layer comprising compds. having ethylenically unsatd. double bonds, photoinitiators, and coloring agents on a support, F-contg. compds. are chem. absorbed or bound on the surface of the microcapsules. The material provides high-quality multicolor images. Thus, a compn. contg. the monomer I, 4,4-dimethoxybenzyl, Et p-dimethylaminobenzoate, and PV Fast Pink E-01 were microencapsulated using isobutylene-maleic anhydride				

copolymer and formaldehyde-urea copolymer. The microcapsules were spreaded on a PET film coated with an adhesive and coated with MF 160 (silane coupling agent) to give a recording film.

ST transfer recording medium microcapsule; fluorine compd microcapsule  
transfer recording

IT Printing, nonimpact  
(using microcapsules coated with fluorine-contg. compds. for high-quality color images)

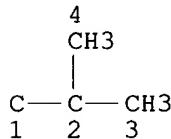
IT 9011-05-6, Formaldehyde-urea copolymer  
RL: USES (Uses)  
(microcapsule contg., coated with fluorine-contg. compds. for multicolor recording materials)

IT 127175-49-9, MF 160  
RL: USES (Uses)  
(microcapsules coated with, for multicolor recording materials)

IT 7631-86-9, Aerosil 300, uses  
RL: USES (Uses)  
(microcapsules coated with, overcoated with fluorine-contg. silane coupling agents for multicolor recording materials)

IT 26426-80-2, Isobutylene-maleic anhydride copolymer  
RL: USES (Uses)  
(microcapsules contg., coated with fluorine-contg. compds. for multicolor recording materials)

=> D QUE  
L7 STR

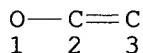


Search with  
isobutylene as  
a monomer  
with silanes

NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE  
L8 STR



NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 3

STEREO ATTRIBUTES: NONE  
L11 STR

Si—O—Ak  
1 2 3

## NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED  
ECOUNT IS M2 C AT 3

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 3

## STEREO ATTRIBUTES: NONE

L13 4820 SEA FILE=REGISTRY SSS FUL L7 AND L8 AND L11  
 L14 161 SEA FILE=REGISTRY ABB=ON L13 AND PMS/CI  
 L16 133 SEA FILE=REGISTRY ABB=ON L14 NOT 1-10/N,S  
 L17 83 SEA FILE=HCAPLUS ABB=ON L16  
 L19 96 SEA FILE=HCAPLUS ABB=ON L14  
 L20 0 SEA FILE=HCAPLUS ABB=ON L19 AND RADIAT?  
 L21 68 SEA FILE=HCAPLUS ABB=ON L17(L) (PREP OR IMF OR SPN)/RL  
 L22 18 SEA FILE=HCAPLUS ABB=ON L17 AND CUR?  
 L23 13 SEA FILE=HCAPLUS ABB=ON L21 AND L22  
 L24 0 SEA FILE=HCAPLUS ABB=ON L17 AND PHOTINITI?  
 L25 36 SEA FILE=HCAPLUS ABB=ON L17 AND (COMPOSITION? OR COMPNS)  
 L26 26 SEA FILE=HCAPLUS ABB=ON L21 AND L25  
 L27 18 SEA FILE=HCAPLUS ABB=ON L26 AND COATING?/SC, SX  
 L28 24 SEA FILE=HCAPLUS ABB=ON L20 OR L23 OR L24 OR L27  
 L29 12 SEA FILE=HCAPLUS ABB=ON L21 AND (?CURAB? OR ?CURED? OR  
     ?CURING?)  
 L30 25 SEA FILE=HCAPLUS ABB=ON L28 OR L29  
 L31 38790 SEA FILE=HCAPLUS ABB=ON (LIGHT? OR RADIAT? OR PHOTO?) (2A) (CUR?  
     OR ?CURABLE? OR ?CURED?  
 L32 43 SEA FILE=HCAPLUS ABB=ON L31 AND ?ISOBUTYLEN?  
 L33 6 SEA FILE=HCAPLUS ABB=ON L32 AND ?SILAN?  
 L34 696 SEA FILE=HCAPLUS ABB=ON ?ISOBUTYLEN? AND ?SILAN?  
 L35 344 SEA FILE=HCAPLUS ABB=ON L34 AND (COMPOSITION? OR COMPNS)  
 L36 5 SEA FILE=HCAPLUS ABB=ON L35 AND PHOTINITIAT?  
 L37 5 SEA FILE=HCAPLUS ABB=ON L35 AND ?ALKENYL?(2A)?ETHER?  
 L38 9 SEA FILE=HCAPLUS ABB=ON L33 OR L36 OR L37  
 L42 1914 SEA FILE=REGISTRY ABB=ON 115-11-7/CRN *isobutylene a component  
     of a polymer*  
 L43 70 SEA FILE=REGISTRY ABB=ON L42 AND 1-10/SI  
 L45 50 SEA FILE=HCAPLUS ABB=ON L43  
 L46 37 SEA FILE=HCAPLUS ABB=ON L45(L) (PREP OR IMF OR SPN)/RL  
 L48 11 SEA FILE=HCAPLUS ABB=ON L46 AND (CUR? OR ?CURABLE? OR ?CURED?  
     OR ?CURING?)  
 L49 20 SEA FILE=HCAPLUS ABB=ON L46 AND (COMPOSITION? OR COMPNS)  
 L50 19 SEA FILE=HCAPLUS ABB=ON (L48 OR L49) AND (COATING? OR  
     POLYMER? OR PLASTIC?)/SC, SX  
 L51 18 SEA FILE=HCAPLUS ABB=ON (L50 OR L30 OR L38) NOT (L30 OR L38)

=> D L51 ALL 1-18 HITSTR

L51 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2002 ACS  
 AN 2002:207623 HCAPLUS  
 DN 136:249150  
 TI Primer compositions and adhesion methods  
 IN Okamoto, Toshihiko; Takase, Junji

PA Kanegafuchi Chemical Industry Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 16 pp.  
 CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D183-04

ICS C09D005-00; C09D183-02; C09D201-00; C09K003-10

CC 42-11 (Coatings, Inks, and Related Products)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 2002080783 A2 20020319 JP 2000-274826 20000911

AB Primers contain .gtoreq.1 of satd. hydrocarbon polymers having Si-bonded OH or hydrolyzable groups and crosslinked via siloxane linkages, vinyl polymers with terminal groups and/or side chains having Si-bonded OH or hydrolyzable groups and crosslinked via siloxane linkages, and polybutadienes having Si-bonded OH or hydrolyzable groups and crosslinked via siloxane linkages and tackifier resins. Thus, isobutylene was initiated with (ClCMe<sub>2</sub>)<sub>2</sub>-p-C<sub>6</sub>H<sub>4</sub> and polymd., terminated with allyltrimethylsilane, hydrosilylated with dimethoxymethylsilane, mixed (50 parts) with a 50% .gamma.-methacryloxypropyltrimethoxysilane-stearyl methacrylate-styrene copolymer soln. 200, Super ester A 125 25, Et silicate 40 25, KBE 603 25, A 189 25, Ti tetrabutoxide 25, hexane 450, and isopropanol 150 parts to prep. a primer.

ST polyisobutylene siloxane primer tackifier; vinyl polymer siloxane primer tackifier; rosin ester tackifier primer

IT Polysiloxanes, uses  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (-vinyl polymers; primer **compns.** contg. hydrocarbon siloxane polymers and tackifiers)

IT Petroleum resins  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (FTR 6125, tackifiers; primer **compns.** contg. hydrocarbon siloxane polymers and tackifiers)

IT Petroleum resins  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (alicyclic, hydrogenated, Arkon M 100, tackifiers; primer **compns.** contg. hydrocarbon siloxane polymers and tackifiers)

IT Silanes  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (amino; primer **compns.** contg. hydrocarbon siloxane polymers and tackifiers)

IT Amines, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (di-C<sub>16</sub>-18-alkyl, Farmin D 86, hardening agents; primer **compns.** contg. hydrocarbon siloxane polymers and tackifiers)

IT Resin acids  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (esters with pentaerythritol, tackifiers; primer **compns.** contg. hydrocarbon siloxane polymers and tackifiers)

IT Polyolefins  
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
 (hydrogenated; primer **compns.** contg. hydrocarbon siloxane polymers and tackifiers)

IT Polymerization  
 (hydrolytic; primer **compns.** contg. hydrocarbon siloxane polymers and tackifiers)

IT Butadiene rubber, uses

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(of 1,2-configuration, B 3000, reaction products with dimethoxymethylsilane; primer **compns.** contg. hydrocarbon siloxane polymers and tackifiers)

IT Hydrocarbons, uses  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polymers, alkoxy silane-contg.; primer **compns.** contg. hydrocarbon siloxane polymers and tackifiers)

IT Vinyl compounds, uses  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polymers, polysiloxane-; primer **compns.** contg. hydrocarbon siloxane polymers and tackifiers)

IT Terpenes, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(polymers; primer **compns.** contg. hydrocarbon siloxane polymers and tackifiers)

IT Oligomers  
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
(polyolefins, hydrogenated; primer **compns.** contg. hydrocarbon siloxane polymers and tackifiers)

IT Coupling agents  
Crosslinking agents  
Hydrosilylation  
Polymerization  
Primers (paints)  
Sealing **compositions**  
Tackifiers  
(primer **compns.** contg. hydrocarbon siloxane polymers and tackifiers)

IT Amines, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(silyl; primer **compns.** contg. hydrocarbon siloxane polymers and tackifiers)

IT 9003-17-2P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(butadiene rubber, of 1,2-configuration, B 3000, reaction products with dimethoxymethylsilane; primer **compns.** contg. hydrocarbon siloxane polymers and tackifiers)

IT 4420-74-0DP, A 189, reaction products with alkoxy silanes and butadiene rubber and silicates and vinyl polymer 5089-72-5DP, KBE 603, reaction products with alkoxy silanes and butadiene rubber and silicates and vinyl polymer 11099-06-2DP, Ethyl silicate, reaction products with alkoxy silanes and butadiene rubber and coupling agents and vinyl polymer 361202-95-1DP, reaction products with allyltrimethoxysilane-isobutylene-dimethoxymethylsilane copolymer and butadiene rubber and dimethoxymethylsilane **404391-25-9DP**, Allyltrimethoxysilane-isobutylene-dimethoxymethylsilane copolymer, reaction products with butadiene rubber and vinyl polymer and dimethoxymethylsilane **404582-93-0P**  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(primer **compns.** contg. hydrocarbon siloxane polymers and tackifiers)

IT **404391-24-8P**, Allyltrimethoxysilane-isobutylene copolymer

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (primer compns. contg. hydrocarbon siloxane polymers and tackifiers)

IT 16881-77-9DP, Dimethoxymethylsilane, reaction products with butadiene rubber 361202-95-1P 404391-25-9P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (primer compns. contg. hydrocarbon siloxane polymers and tackifiers)

IT 9003-17-2D, Polybutadiene, epoxidized 9003-27-4D, Polyisobutylene, dimethoxysilyl-terminated 153301-63-4, ADK Cizer BF 1000 207137-22-2, PAO 5004 223537-50-6, Epion EP 505S  
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
 (primer compns. contg. hydrocarbon siloxane polymers and tackifiers)

IT 80-56-8D, .alpha.-Pinene, polymers, hydrogenated 115-77-5D, Pentaerythritol, rosin esters 110735-14-3, Clearon P 125 123759-85-3, Super ester A 125  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (tackifiers; primer compns. contg. hydrocarbon siloxane polymers and tackifiers)

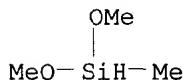
IT 404391-25-9DP, Allyltrimethoxysilane-isobutylene-dimethoxymethylsilane copolymer, reaction products with butadiene rubber and vinyl polymer and dimethoxymethylsilane 404582-93-0P  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (primer compns. contg. hydrocarbon siloxane polymers and tackifiers)

RN 404391-25-9 HCPLUS  
 CN Silane, dimethoxymethyl-, polymer with 2-methyl-1-propene and trimethoxy-2-propenylsilane (9CI) (CA INDEX NAME)

CM 1

CRN 16881-77-9

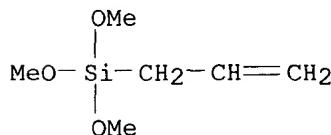
CMF C3 H10 O2 Si



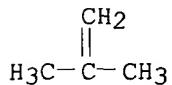
CM 2

CRN 2551-83-9

CMF C6 H14 O3 Si

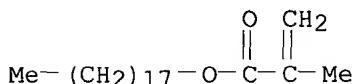


CM 3

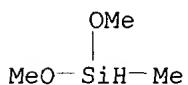
CRN 115-11-7  
CMF C4 H8

RN 404582-93-0 HCPLUS  
 CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with dimethoxymethylsilane, ethenylbenzene, 2-methyl-1-propene, silicic acid ethyl ester, N-[3-(triethoxysilyl)propyl]-1,2-ethanediamine, trimethoxy-2-propenylsilane, 3-(trimethoxysilyl)-1-propanethiol and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

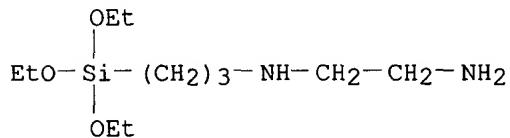
CM 1

CRN 32360-05-7  
CMF C22 H42 O2

CM 2

CRN 16881-77-9  
CMF C3 H10 O2 Si

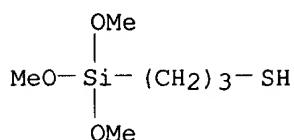
CM 3

CRN 5089-72-5  
CMF C11 H28 N2 O3 Si

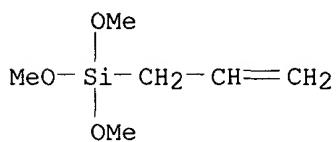
CM 4

CRN 4420-74-0

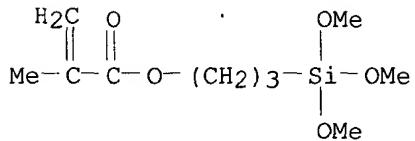
CMF C6 H16 O3 S Si



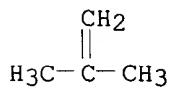
CM 5

CRN 2551-83-9  
CMF C6 H14 O3 Si

CM 6

CRN 2530-85-0  
CMF C10 H20 O5 Si

CM 7

CRN 115-11-7  
CMF C4 H8

CM 8

CRN 100-42-5  
CMF C8 H8 $\text{H}_2\text{C}=\text{CH}-\text{Ph}$

CM 9

CRN 11099-06-2  
 CMF C2 H6 O . x Unspecified

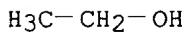
CM 10

CRN 1343-98-2  
 CMF Unspecified  
 CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 11

CRN 64-17-5  
 CMF C2 H6 O



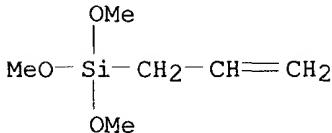
IT 404391-24-8P, Allyltrimethoxysilane-isobutylene copolymer  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (primer compns. contg. hydrocarbon siloxane polymers and tackifiers)

RN 404391-24-8 HCPLUS

CN Silane, trimethoxy-2-propenyl-, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

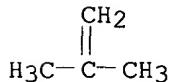
CM 1

CRN 2551-83-9  
 CMF C6 H14 O3 Si



CM 2

CRN 115-11-7  
 CMF C4 H8



IT 404391-25-9P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(primer compns. contg. hydrocarbon siloxane polymers and tackifiers)

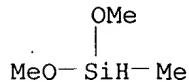
RN 404391-25-9 HCAPLUS

CN Silane, dimethoxymethyl-, polymer with 2-methyl-1-propene and trimethoxy-2-propenylsilane (9CI) (CA INDEX NAME)

CM 1

CRN 16881-77-9

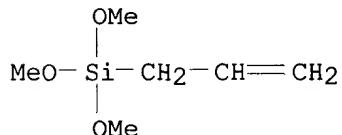
CMF C3 H10 O2 Si



CM 2

CRN 2551-83-9

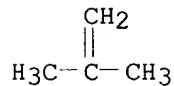
CMF C6 H14 O3 Si



CM 3

CRN 115-11-7

CMF C4 H8



L51 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:463299 HCAPLUS

DN 135:62093

TI Hydrosilylation-**curable** isobutylene resin **compositions** and their use in electrically conductive **compositions** with reduced brittleness and good stretchability

IN Manabe, Takao; Tsunemi, Hideshige

PA Kanegafuchi Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08L083-05

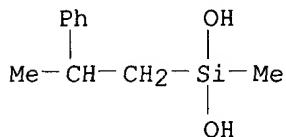
ICS C08K003-00; C08K003-04; C08L023-22

CC 37-3 (Plastics Manufacture and Processing)

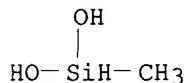
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001172504	A2	20010626	JP 1999-362896	19991221
AB	The conductive compns. comprise (A) isobutylene polymers bearing hydrosilylation-curable alkenyl groups, (B) .gt;eq.2 kinds of compds. bearing .gt;eq.2 SiH groups, (C) hydrosilylation catalysts and (D) elec. conductors. Thus, mixing CH <sub>2</sub> :CHCH <sub>2</sub> (CMe <sub>2</sub> CH <sub>2</sub> ) <sub>m</sub> CMe <sub>2</sub> XCM <sub>2</sub> (CH <sub>2</sub> CMe <sub>2</sub> ) <sub>n</sub> CH <sub>2</sub> CH:CH <sub>2</sub> (X = 1,4-phenylene; m, n >1) 100 with Mark AO-50 (antioxidant) 1, Me <sub>3</sub> SiO(SiHMeO) <sub>6</sub> (SiRMeO) <sub>1.5</sub> SiMe <sub>3</sub> (R = 2-phenylpropyl) 1.3, Me <sub>3</sub> SiO(SiHMeO) <sub>3</sub> (SiRMeO) <sub>2</sub> SiMe <sub>3</sub> (R = 2-phenylpropyl) 7.0 g, a Pt catalyst and di-Me maleate (stabilizer), and press molding gave test pieces with tensile break strength 6.0 kg/cm <sup>2</sup> , elongation 280% and zero crack.				
ST	hydrosilylation curable allyl terminated isobutylene resin compn; elec conductive resin compn hydrosilylation curable				
IT	Hydrosilylation (crosslinking by; hydrosilylation-curable isobutylene resin compns. and use in elec. conductive compns. with reduced brittleness and good stretchability)				
IT	Carbon black, uses RL: MOA (Modifier or additive use); USES (Uses) (elec. conductors; hydrosilylation-curable isobutylene resin compns. and use in elec. conductive compns. with reduced brittleness and good stretchability)				
IT	Crosslinking (hydrosilylation; hydrosilylation-curable isobutylene resin compns. and use in elec. conductive compns. with reduced brittleness and good stretchability)				
IT	Polysiloxanes, preparation RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyisobutylene-contg.; hydrosilylation-curable isobutylene resin compns. and use in elec. conductive compns. with reduced brittleness and good stretchability)				
IT	331822-22-1P RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (hydrosilylation-curable isobutylene resin compns. and use in elec. conductive compns. with reduced brittleness and good stretchability)				
IT	9003-27-4D, Polyisobutene, allyl-terminated 176236-26-3D, Methylsilanediol-methyl(2-phenylpropyl)silanediol copolymer, trimethylsilyl-terminated RL: POF (Polymer in formulation); RCT (Reactant); RACT (Reactant or reagent); USES (Uses) (hydrosilylation-curable isobutylene resin compns. and use in elec. conductive compns. with reduced brittleness and good stretchability)				
IT	331822-22-1P RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (hydrosilylation-curable isobutylene resin compns. and use in elec. conductive compns. with reduced brittleness and good stretchability)				
RN	331822-22-1 HCPLUS				
CN	Silanediol, methyl(2-phenylpropyl)-, polymer with 2-methyl-1-propene and methysilanediol (9CI) (CA INDEX NAME)				

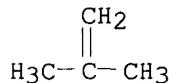
CM 1

CRN 160174-13-0  
CMF C10 H16 O2 Si

CM 2

CRN 43641-90-3  
CMF C H6 O2 Si

CM 3

CRN 115-11-7  
CMF C4 H8

L51 ANSWER 3 OF 18 HCPLUS COPYRIGHT 2002 ACS  
 AN 2001:421134 HCPLUS  
 DN 135:20696  
 TI Olefin polymer **compositions** containing metal oxides and their moldings with excellent flexibility and thermal stability  
 IN Chujou, Yoshiaki; Ito, Kanenori; Komiya, Yukiatsu  
 PA Kuraray Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 19 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C08L023-02  
 ICS C08J005-00; C08L023-00; C08L025-00; C08L047-00; C08L053-02;  
 C08L083-04; C08L085-00; C08L091-00  
 CC 38-3 (**Plastics** Fabrication and Uses)  
 Section cross-reference(s): 37  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001158840	A2	20010612	JP 1999-342365	19991201
AB	The <b>compns.</b> , useful for packings, hoses, and gaskets, contain olefin polymers (A) having 10-70% arom. vinyl units and metal oxides (B)				

contg. Si and aryl groups, .gtoreq.20 and .gtoreq.0.1 mol.% (on total metal atoms), resp., wherein metal atoms in B are bonded via O atoms and the wt. ratio of A/(A + B) is 0.750-0.999. Thus, a sheet manufd. from 90 parts styrene-isoprene-styrene triblock copolymer and 10 parts phenyltrimethoxysilane showed elongation at break >500% and tensile strength retention .gtoreq.95% after 24 h at 120.degree..

ST thermal stability olefin polymer metal alkoxide; flexibility arom vinyl polymer phenyltrimethoxysilane molding; sol gel process styrene alkoxysilane copolymer

IT Naphthenic oils  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (PW 380; olefin polymer **compns.** contg. metal alkoxides for moldings with good flexibility and thermal stability)

IT Paraffin oils  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (PW 90; olefin polymer **compns.** contg. metal alkoxides for moldings with good flexibility and thermal stability)

IT Polyolefin rubber  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (ethylene-octene, Engage EG 8200; olefin polymer **compns.**  
 contg. metal alkoxides for moldings with good flexibility and thermal stability)

IT Polyolefins  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (olefin polymer **compns.** contg. metal alkoxides for moldings with good flexibility and thermal stability)

IT Molded plastics, uses  
 Polymer blends  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (olefin polymer **compns.** contg. metal alkoxides for moldings with good flexibility and thermal stability)

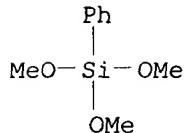
IT 343336-40-3P 343336-42-5P 343336-50-5P  
 RL: **IMF (Industrial manufacture)**; POF (Polymer in formulation);  
 PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)  
 (olefin polymer **compns.** contg. metal alkoxides for moldings with good flexibility and thermal stability)

IT 681-84-5DP, Tetramethoxysilane, polymer with hydrogenated butadiene-styrene block copolymer 780-69-8DP, Phenyltriethoxysilane, polymer with partially hydrogenated styrene-isoprene block copolymer 2996-92-1DP, Phenyltrimethoxysilane, polymer with hydrogenated butadiene-styrene block copolymer 105729-79-1DP, Styrene-isoprene block copolymer, partially hydrogenated, polymer with phenyltriethoxysilane 106107-54-4DP, Butadiene-styrene block copolymer, hydrogenated, polymer with phenyltrimethoxysilane and tetramethoxysilane 110389-01-ODP, Butadiene-isoprene-styrene block copolymer, hydrogenated, polymer with phenyltrimethoxysilane 343336-43-6P 343336-44-7P 343336-45-8P  
**343336-46-9P** 343336-47-0P 343336-49-2P  
 RL: **IMF (Industrial manufacture)**; PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)  
 (olefin polymer **compns.** contg. metal alkoxides for moldings with good flexibility and thermal stability)

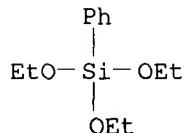
IT 9003-07-0, J 106W  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (olefin polymer **compns.** contg. metal alkoxides for moldings

with good flexibility and thermal stability)  
IT 9002-88-4, Mirason 401 26221-73-8, ethylene-octene copolymer  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or  
engineered material use); USES (Uses)  
(rubber; olefin polymer compns. contg. metal alkoxides for  
moldings with good flexibility and thermal stability)  
IT 343336-50-5P  
RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
PRP (Properties); TEM (Technical or engineered material use); PREP  
(Preparation); USES (Uses)  
(olefin polymer compns. contg. metal alkoxides for moldings  
with good flexibility and thermal stability)  
RN 343336-50-5 HCAPLUS  
CN Silane, triethoxyphenyl-, polymer with ethenylbenzene, 2-methyl-1-propene  
and trimethoxyphenylsilane (9CI) (CA INDEX NAME)

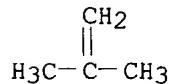
CM 1

CRN 2996-92-1  
CMF C9 H14 O3 Si

CM 2

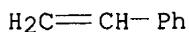
CRN 780-69-8  
CMF C12 H20 O3 Si

CM 3

CRN 115-11-7  
CMF C4 H8

CM 4

CRN 100-42-5  
CMF C8 H8



IT 343336-46-9P

RL: **IMF (Industrial manufacture)**; PRP (Properties); TEM  
 (Technical or engineered material use); **PREP (Preparation)**; USES  
 (Uses)  
 (olefin polymer compns. contg. metal alkoxides for moldings  
 with good flexibility and thermal stability)

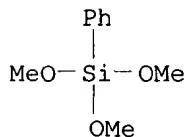
RN 343336-46-9 HCAPLUS

CN Silane, trimethoxyphenyl-, polymer with ethenylbenzene and  
 2-methyl-1-propene (9CI) (CA INDEX NAME)

CM 1

CRN 2996-92-1

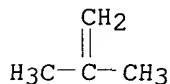
CMF C9 H14 O3 Si



CM 2

CRN 115-11-7

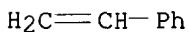
CMF C4 H8



CM 3

CRN 100-42-5

CMF C8 H8



L51 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:372273 HCAPLUS

DN 134:368373

TI Finishing methods for the interior and exterior walls and floors and  
 building panels

IN Ando, Katsuhiro; Chinami, Makoto; Takase, Junji

PA Kanegafuchi Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09J183-04

ICS C09J009-00; E04F013-08

CC 42-11 (**Coatings, Inks, and Related Products**)  
Section cross-reference(s): 38, 58

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001139918	A2	20010522	JP 1999-327812	19991118
AB	Moisture- <b>curable</b> adhesives for finishing contain satd. hydrocarbon polymers having hydrolyzable Si groups and silane coupling agents. Thus, an adhesive for bonding a ceramic tile to mortar contained a main agent contg. a polymer prep'd. from allyl-terminated polyisobutylene and methyldimethoxysilane 130, a plasticizer 60, EDS-D10A CaCO3 50, heavy CaCO3 180, a thixotropic agent 2, stabilizers 3, A 1310 6, and A 187 3 parts and a hardening agent contained a plasticizer 16, a SCAT-27 catalyst 4, heavy CaCO3 10, carbon black 2.5, Zeolite A 6, and water 4 parts.				
ST	moisture <b>curable</b> adhesive methoxysilane polyisoprene coupling agent; silane coupling agent adhesive tile mortar				
IT	Silanes RL: RCT (Reactant); RACT (Reactant or reagent) (alkoxy; moisture- <b>curable</b> adhesives for finishing interior and exterior walls and floors and building panels)				
IT	Tiles (ceramic; moisture- <b>curable</b> adhesives for finishing interior and exterior walls and floors and building panels)				
IT	Coupling agents Crosslinking Floors Humidity Hydrosilylation Mortar Walls (construction) (moisture- <b>curable</b> adhesives for finishing interior and exterior walls and floors and building panels)				
IT	Adhesives (moisture- <b>curable</b> ; moisture- <b>curable</b> adhesives for finishing interior and exterior walls and floors and building panels)				
IT	Construction materials (panels; moisture- <b>curable</b> adhesives for finishing interior and exterior walls and floors and building panels)				
IT	340271-38-7P 340271-39-8P RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (moisture- <b>curable</b> adhesives for finishing interior and exterior walls and floors and building panels)				
IT	762-72-1DP, Allyltrimethylsilane, reaction products with polyisobutylene 9003-27-4DP, Polyisobutylene, allyl-terminated 16881-77-9DP, Methyldimethoxysilane, reaction products with allyl-terminated polyisobutylene RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (moisture- <b>curable</b> adhesives for finishing interior and exterior walls and floors and building panels)				
IT	340271-38-7P 340271-39-8P RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)				

(moisture-curable adhesives for finishing interior and exterior walls and floors and building panels)

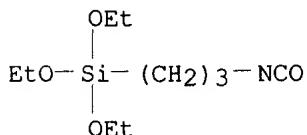
RN 340271-38-7 HCAPLUS

CN Silane, triethoxy(3-isocyanatopropyl)-, polymer with dimethoxymethylsilane, 2-methyl-1-propene, trimethoxy[3-(oxiranylmethoxy)propyl]silane and trimethyl-2-propenylsilane (9CI) (CA INDEX NAME)

CM 1

CRN 24801-88-5

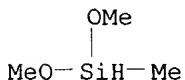
CMF C10 H21 N O4 Si



CM 2

CRN 16881-77-9

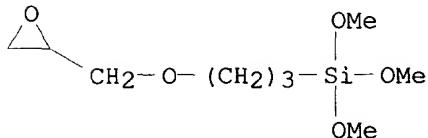
CMF C3 H10 O2 Si



CM 3

CRN 2530-83-8

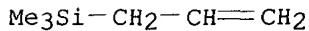
CMF C9 H20 O5 Si



CM 4

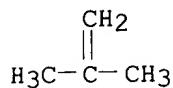
CRN 762-72-1

CMF C6 H14 Si



CM 5

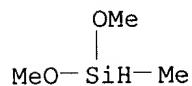
CRN 115-11-7  
 CMF C4 H8



RN 340271-39-8 HCAPLUS  
 CN 1,2-Ethanediamine, N-[3-(trimethoxysilyl)propyl]-, polymer with dimethoxymethylsilane, ethenyltrimethoxysilane, 2-methyl-1-propene and trimethyl-2-propenylsilane (9CI) (CA INDEX NAME)

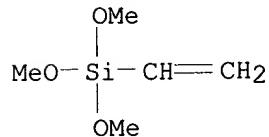
CM 1

CRN 16881-77-9  
 CMF C3 H10 O2 Si



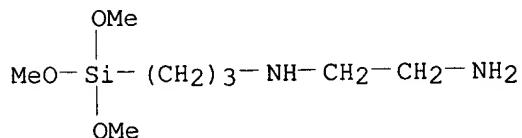
CM 2

CRN 2768-02-7  
 CMF C5 H12 O3 Si



CM 3

CRN 1760-24-3  
 CMF C8 H22 N2 O3 Si



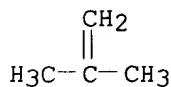
CM 4

CRN 762-72-1  
 CMF C6 H14 Si

Me3Si-CH2-CH=CH2

CM 5

CRN 115-11-7  
CMF C4 H8



L51 ANSWER 5 OF 18 HCPLUS COPYRIGHT 2002 ACS  
 AN 2000:731645 HCPLUS  
 DN 133:310955  
 TI Water-based coating **compositions** with good storage stability and resistance to soiling and weather  
 IN Inomoto, Katsuhiko; Wada, Susumu; Tsuda, Nobuhiko; Mitsuhasha, Akio; Nagato, Hiroshi; Kunimasa, Keiko  
 PA Daikin Industries, Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 14 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D005-00  
 ICS C09D007-12; C09D133-00  
 CC 42-10 (**Coatings, Inks, and Related Products**)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000290536 JP 3289700 WO 2000061691	A2 B2 A1	20001017 20020610 20001019	JP 1999-103327 WO 2000-JP2167	19990409 20000404

W: US  
 RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRAI JP 1999-103327 A 19990409  
 AB The coating **compns.** comprise an org. polymer in aq. dispersion, colloidal silica, polyether-modified and optionally org. functionalized silane couplers. Thus, polymg. a 74:14:12 mixt. of vinylidene fluoride, tetrafluoroethylene and chlorotrifluoroethylene in water contg. a polyethylene glycol monostearate gave a polymer dispersion (38% solids content), 100 g of which was mixed with methacrylic acid 13.82, Bu acrylate 0.14, acrylic acid 0.14 and polyethylene oxide Me ether acrylate 2.17 g, an emulsifying agent and a persulfate, heated at 85.degree. for 3 h, cooled and neutralized with NH3 to give a copolymer dispersion (A) with solids content 50%. A coating contg. the A 100 (as solids), Snowtex CM 40 (silica) 40, A 1230 (trimethoxysilylpropyl-terminated PEG) as coupler 3.5 and AZ-6173 (epoxysilane coupler) 2 parts had good dryability, transparency and coat film properties.  
 ST waterborne coating fluoropolymer acrylic resin colloidal silica filler; polyether modified silane coupler waterborne coating  
 IT Silanes  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (coupler; water-based coating **compns.** with good storage stability and resistance to soiling and weather)

IT Coupling agents  
   (water-based coating compns. with good storage stability and  
   resistance to soiling and weather)

IT Fluoropolymers, uses  
   RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or  
   engineered material use); PREP (Preparation); USES (Uses)  
   (water-based coating compns. with good storage stability and  
   resistance to soiling and weather)

IT 7631-86-9, Silica, uses  
   RL: MOA (Modifier or additive use); USES (Uses)  
   (colloidal, fillers; water-based coating compns. with good  
   storage stability and resistance to soiling and weather)

IT 919-30-2, A-1100 2530-83-8 24801-88-5, KBE 9007 98358-37-3, A 1230  
 301683-98-7, AZ-6173  
   RL: MOA (Modifier or additive use); USES (Uses)  
   (coupler; water-based coating compns. with good storage  
   stability and resistance to soiling and weather)

IT 25190-89-0P, Hexafluoropropylene-tetrafluoroethylene-vinylidene fluoride  
 copolymer 30421-59-1P, Chlorotrifluoroethylene-tetrafluoroethylene-  
 vinylidene fluoride copolymer 302598-77-2P, Chlorotrifluoroethylene-  
 crotonic acid-cyclohexyl vinyl ether-ethyl vinyl ether-polyethylene glycol  
 monoallyl ether copolymer ammonium salt 302598-79-4P,  
 Chlorotrifluoroethylene-crotonic acid-cyclohexyl vinyl ether-ethyl vinyl  
 ether-polyethylene glycol monoallyl ether-vinyltrimethoxysilane graft  
 copolymer ammonium salt 302598-81-8P, Crotonic acid-isobutylene-  
 polyethylene glycol monoallyl ether-tetrafluoroethylene-vinyl benzoate  
 graft copolymer triethylamine salt **302598-83-0P** 302598-85-2P,  
 Acrylic acid-butyl acrylate-methyl methacrylate-methoxypolyethylene glycol  
 acrylate graft copolymer ammonium salt 302598-97-6P 302598-99-8P  
**302599-01-5P** 302599-03-7P, Acrylic acid-butyl acrylate-ethylene  
 oxide-methyl methacrylate graft copolymer ammonium salt  
   RL: **IMF (Industrial manufacture)**; PRP (Properties); TEM  
   (Technical or engineered material use); **PREP (Preparation)**; USES  
   (Uses)  
     (polymer dispersion; water-based coating compns. with good  
     storage stability and resistance to soiling and weather)

IT 55067-89-5P, Acrylic acid-butyl acrylate-methyl methacrylate copolymer  
 triethylamine salt 302598-86-3P 302598-87-4P 302598-88-5P  
 302598-90-9P 302598-91-0P 302598-93-2P 302598-95-4P 302599-04-8P  
 302599-05-9P 302599-06-0P 302599-07-1P 302599-09-3P 302599-11-7P  
   RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or  
   engineered material use); PREP (Preparation); USES (Uses)  
     (water-based coating compns. with good storage stability and  
     resistance to soiling and weather)

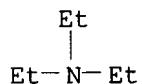
IT **302598-83-0P** **302599-01-5P**  
   RL: **IMF (Industrial manufacture)**; PRP (Properties); TEM  
   (Technical or engineered material use); **PREP (Preparation)**; USES  
   (Uses)  
     (polymer dispersion; water-based coating compns. with good  
     storage stability and resistance to soiling and weather)

RN 302598-83-0 HCPLUS

CN Benzoic acid, ethenyl ester, polymer with 2-butenoic acid,  
 ethenyltrimethoxysilane, 2-methyl-1-propene, .alpha.-2-propenyl-.omega.-  
 hydroxypoly(oxy-1,2-ethanediyl) and tetrafluoroethene, graft, compd. with  
 N,N-diethylethanamine (9CI) (CA INDEX NAME)

CM 1

CRN 121-44-8  
 CMF C6 H15 N



CM 2

CRN 302598-82-9

CMF (C9 H8 O2 . C5 H12 O3 Si . C4 H8 . C4 H6 O2 . (C2 H4 O)n C3 H6 O . C2 F4) x

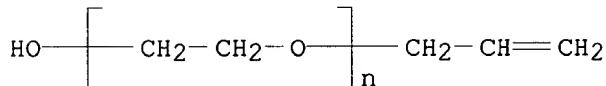
CCI PMS

CM 3

CRN 27274-31-3

CMF (C<sub>2</sub>H<sub>4</sub>O)<sub>n</sub>C<sub>3</sub>H<sub>6</sub>O

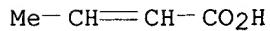
CCI PMS



CM 4

CRN 3724-65-0

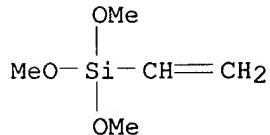
CMF C4 H6 O2



CM 5

CRN 2768-02-7

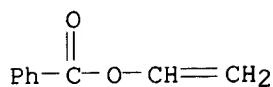
CMF C5 H12 O3 Si



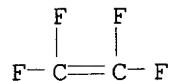
CM 6

CRN 769-78-8

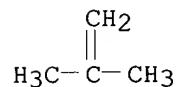
CMF C9 H8 O2



CM 7

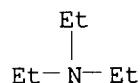
CRN 116-14-3  
CMF C2 F4

CM 8

CRN 115-11-7  
CMF C4 H8

RN 302599-01-5 HCAPLUS  
CN Benzoic acid, ethenyl ester, polymer with 2-butenoic acid,  
ethenyltrimethoxysilane, 2-methyl-1-propene, oxirane and  
tetrafluoroethylene, graft, compd. with N,N-diethylethanamine (9CI) (CA  
INDEX NAME)

CM 1

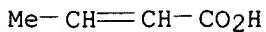
CRN 121-44-8  
CMF C6 H15 N

CM 2

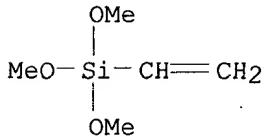
CRN 302599-00-4  
CMF (C9 H8 O2 . C5 H12 O3 Si . C4 H8 . C4 H6 O2 . C2 H4 O . C2 F4)x  
CCI PMS

CM 3

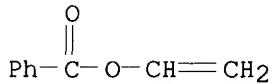
CRN 3724-65-0  
CMF C4 H6 O2



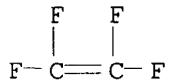
CM 4

CRN 2768-02-7  
CMF C5 H12 O3 Si

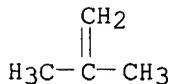
CM 5

CRN 769-78-8  
CMF C9 H8 O2

CM 6

CRN 116-14-3  
CMF C2 F4

CM 7

CRN 115-11-7  
CMF C4 H8

CM 8

CRN 75-21-8  
CMF C2 H4 O

L51 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2002 ACS  
AN 2000:12695 HCAPLUS  
DN 132:69099  
TI Polysiloxane-polybutylene copolymers for cosmetics  
IN Leboucher, Marie-agnes; Rees, Sian; Vincent, Anne-marie  
PA Dow Corning S. A., Belg.; Dow Corning Corp.  
SO Eur. Pat. Appl., 9 pp.  
CODEN: EPXXDW  
DT Patent  
LA English  
IC ICM C08G077-442  
CC 62-4 (Essential Oils and Cosmetics)  
Section cross-reference(s): 38  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 969032	A2	20000105	EP 1999-305007	19990625
	EP 969032	A3	20000202		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 6204329	B1	20010320	US 1999-345220	19990630
	JP 2000044638	A2	20000215	JP 1999-187919	19990701
PRAI	GB 1998-14211	A	19980701		

AB The present invention describes a polysiloxane-polybutylene copolymer having polybutylene chains grafted onto a polysiloxane backbone. These copolymers have a variety of properties which render them valuable for applications in personal care. Thus, a copolymer was prep'd. by the treatment of Glissopal-1000 with methylsilanediol and dimethylsilanediol in the presence of platinum. Sensory tests by 10 panelists were conducted to judge shine on hair by combing swatches with compns. contg. the above polymer and a control without the siloxanes. The polymer according to the invention gave better shine than the control.  
ST polysiloxane olefin graft cosmetic prep'n; polybutylene polysiloxane copolymer cosmetic prep'n  
IT Polysiloxanes, biological studies  
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(graft; polysiloxane-polybutylene copolymers for cosmetics)  
IT Cosmetics  
(lipsticks; polysiloxane-polybutylene copolymers for cosmetics)  
IT Cosmetics  
Hair preparations  
(polysiloxane-polybutylene copolymers for cosmetics)  
IT 111-66-0DP, 1-Octene, reaction products with isobutylene-siloxane graft copolymers 112-41-4DP, 1-Dodecene, reaction products with isobutylene-siloxane graft copolymers 190439-04-4P  
253342-42-6DP, reaction products with olefins  
253342-42-6DP, reaction products with olefins 253349-04-1P  
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(polysiloxane-polybutylene copolymers for cosmetics)

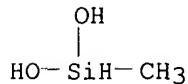
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE  
(1) Anon; EP 0969032 A2 HCAPLUS

IT 190439-04-4P 253342-42-6DP, reaction products with  
 olefins 253349-04-1P  
 RL: BUU (Biological use, unclassified); SPN (Synthetic  
 preparation); BIOL (Biological study); PREP (Preparation);  
 USES (Uses)  
 (polysiloxane-polybutylene copolymers for cosmetics)

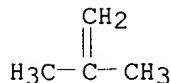
RN 190439-04-4 HCPLUS

CN Silanediol, methyl-, polymer with 2-methyl-1-propene, graft (9CI) (CA  
 INDEX NAME)

CM 1

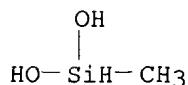
CRN 43641-90-3  
 CMF C H6 O2 Si

CM 2

CRN 115-11-7  
 CMF C4 H8

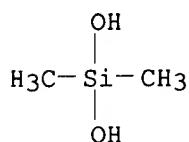
RN 253342-42-6 HCPLUS  
 CN Silanediol, dimethyl-, polymer with 2-methyl-1-propene and  
 methyldilanediol, graft (9CI) (CA INDEX NAME)

CM 1

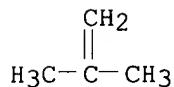
CRN 43641-90-3  
 CMF C H6 O2 Si

CM 2

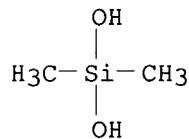
CRN 1066-42-8  
 CMF C2 H8 O2 Si



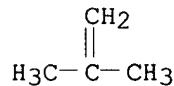
CM 3

CRN 115-11-7  
CMF C4 H8RN 253349-04-1 HCPLUS  
CN Silanediol, dimethyl-, polymer with 2-methyl-1-propene, graft (9CI) (CA  
INDEX NAME)

CM 1

CRN 1066-42-8  
CMF C2 H8 O2 Si

CM 2

CRN 115-11-7  
CMF C4 H8L51 ANSWER 7 OF 18 HCPLUS COPYRIGHT 2002 ACS  
AN 2000:10653 HCPLUS  
DN 132:79313  
TI Thermoplastic resin composition  
IN Aoyama, Taizo; Kimura, Katsuhiko  
PA Kaneka Corporation, Japan  
SO U.S., 17 pp., Cont.-in-part of U.S. 5,834,563.  
CODEN: USXXAM  
DT Patent  
LA English

IC ICM C08L009-00  
 NCL 525086000  
 CC 37-6 (**Plastics** Manufacture and Processing)  
 Section cross-reference(s): 39

## FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6011116	A	20000104	US 1997-940008	19970929
	JP 09302169	A2	19971125	JP 1996-113697	19960508
	JP 10101869	A2	19980421	JP 1996-262788	19961003
	US 5834563	A	19981110	US 1997-852164	19970506
PRAI	JP 1996-113697	A	19960508		
	JP 1996-262788	A	19961003		
	US 1997-852164	A2	19970506		
AB	A thermoplastic resin <b>compn.</b> comprises a thermoplastic resin and composite rubber particles and/or a graft copolymer. The composite rubber particles comprise an isobutylene elastomer or oil and vinyl polymer other than the isobutylene elastomer or oil. The composite rubber particles have a structure that the isobutylene elastomer or oil and vinyl polymer are entangled with each other so as not to be sepd., the composite rubber particles being in the form of particle having an av. particle size of 0.05 to 10 mm and having a gel content not less than 20%, and the graft copolymer is prep'd. by graft-polymg. a vinyl monomer to the composite rubber particles,. The thermoplastic resin is selected from the group consisting of polyolefin resins, poly(Me methacrylate), poly(vinyl chloride), polycarbonate, polyester, a mixt. of polycarbonate and polyester, polyamide, polystyrene, poly(phenylene ether), a mixt. of polystyrene and poly(phenylene ether), polyacetal, polysulfone, polyphenylene sulfide, polyimide, polyether ketone, polyarylate, and homopolymers or copolymers obtained by polymg. 70 to 100% of at least one of vinyl monomers of arom. alkenyl compds., cyanided vinyl compds. and (meth)acrylates with 30 to 0% of other vinyl monomer copolymerizable with at least one of the vinyl monomer and a diene monomer, and the vinyl polymer is selected from the group consisting of acrylates, methacrylates, arom. alkenyl compds. and cyanided vinyl compds. The thermoplastic resin <b>compn.</b> exhibits good impact resistance with maintaining excellent transparency, weather resistance and thermal stability.				
ST	graft rubber thermoplastic blend impact resistance				
IT	Polyesters, properties RL: POF (Polymer in formulation); PRP (Properties); USES (Uses) (arom.; thermoplastic resin <b>compn.</b> )				
IT	Polyketones Polyketones RL: POF (Polymer in formulation); PRP (Properties); USES (Uses) (polyether-; thermoplastic resin <b>compn.</b> )				
IT	Polyethers, properties Polyethers, properties RL: POF (Polymer in formulation); PRP (Properties); USES (Uses) (polyketone-; thermoplastic resin <b>compn.</b> )				
IT	Impact-resistant materials (thermoplastic resin <b>compn.</b> )				
IT	Isobutylene rubber Polyamides, properties Polycarbonates, properties Polyesters, properties Polyimides, properties Polyolefins Polyoxymethylenes, properties Polyoxyphenylenes Polysulfones, properties				

Polythiophenylenes  
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
 (thermoplastic resin compn.)

IT Polymer blends  
 RL: PRP (Properties)  
 (thermoplastic resin compn.)

IT Plastics, properties  
 RL: PRP (Properties)  
 (thermoplastics; thermoplastic resin compn.)

IT 9003-27-4  
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
 (isobutylene rubber, thermoplastic resin compn.)

IT 253585-58-9P, Allyl methacrylate-butene-butyl acrylate-isobutylene graft copolymer  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); PREP (Preparation); USES (Uses)  
 (rubber; thermoplastic resin compn.)

IT 198778-67-5P, Allyl methacrylate butyl acrylate isobutylene methyl methacrylate graft copolymer 205037-17-8P **205037-18-9P**  
**205037-19-0P** 253585-59-0P, Allyl methacrylate-butyl acrylate-isobutylene graft copolymer **253585-60-3P**, Allyl methacrylate-butyl acrylate-isobutylene-(3-methacryloyloxypropyl)trimethoxysilane graft copolymer **253585-61-4P**  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); PREP (Preparation); USES (Uses)  
 (thermoplastic resin compn.)

IT 9002-86-2, S 1008 9002-88-4, Polyethylene 9003-07-0, Noblen D 501  
 9003-53-6, Polystyrene 9011-14-7, Poly(methyl methacrylate) 9011-87-4,  
 Parapet G 1000 24936-68-3, L-1250, properties 24968-12-5, Duranex 2002  
 25037-45-0, Bisphenol A-carbonic acid copolymer 26007-55-6, Apel 6013  
 26062-94-2, 1,4-Butanediol-terephthalic acid copolymer  
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
 (thermoplastic resin compn.)

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Adur; US 4957968 1990 HCPLUS
- (2) Anon; EP 0332188 1989 HCPLUS
- (3) Anon; JP 830102 1996
- (4) Chung; US 5401805 1995 HCPLUS
- (5) Daumiller; US 3458599 1969
- (6) Dean; US 4647619 1987 HCPLUS
- (7) Faust; US 5428111 1995 HCPLUS
- (8) Forbes; US 3894119 1975 HCPLUS
- (9) Frechet; US 5210148 1993 HCPLUS
- (10) Geall; US 4151159 1979 HCPLUS
- (11) Kaszas; US 5276094 1994 HCPLUS
- (12) Kennedy; US 4946899 1990 HCPLUS
- (13) Kennedy; US 5242983 1993 HCPLUS
- (14) Kennedy; US 5395885 1995 HCPLUS
- (15) Kennedy, J; Polymer Bulletin 1985, V13, P441 HCPLUS
- (16) Nishio; US 5159018 1992 HCPLUS
- (17) Ohara; US 4384076 1983 HCPLUS
- (18) Ohara; US 4481330 1984 HCPLUS
- (19) Powers; US 5548029 1996 HCPLUS
- (20) Sasaki; US 4894415 1990 HCPLUS
- (21) Shoji; US 4154777 1979 HCPLUS
- (22) Shulman; US 4500681 1985 HCPLUS
- (23) Storey; US 5458796 1995 HCPLUS
- (24) Venkataswamy; US 5574105 1996 HCPLUS
- (25) Wang; US 5013793 1991 HCPLUS

(26) Wang; US 5508038 1996 HCPLUS

(27) Yu; US 5051477 1991 HCPLUS

IT 205037-18-9P 205037-19-0P 253585-60-3P, Allyl  
 methacrylate-butyl acrylate-isobutylene-(3-methacryloyloxypropyl)trimethoxysilane graft copolymer 253585-61-4P  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 PRP (Properties); PREP (Preparation); USES (Uses)  
 (thermoplastic resin compn.)

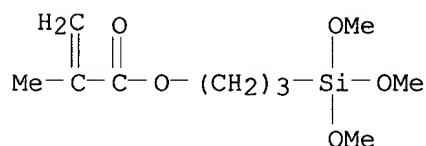
RN 205037-18-9 HCPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl  
 2-propenoate, 2-methyl-1-propene, 2-propenyl 2-methyl-2-propenoate and  
 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX  
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CRN 2530-85-0

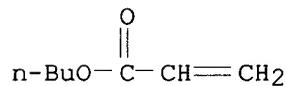
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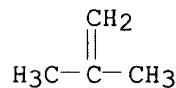
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CRN 115-11-7

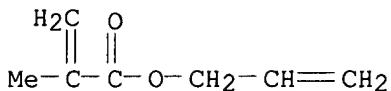
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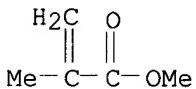
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CMF C7 H10 O2



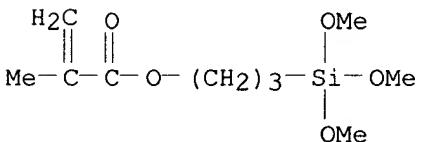
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CRN 80-62-6  
CMF C5 H8 O2

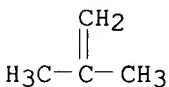
RN 205037-19-0 HCPLUS

CN 2-Propenoic acid, 2-methyl-, 2-propenyl ester, polymer with  
ethenylbenzene, 2-methyl-1-propene and 3-(trimethoxysilyl)propyl  
2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

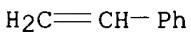
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CMF C10 H20 O5 Si

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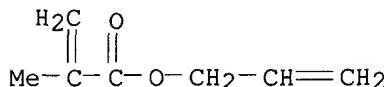
CRN 115-11-7  
CMF C4 H8

CM 3

CRN 100-42-5  
CMF C8 H8

CM 4

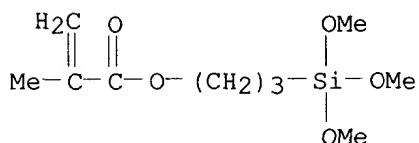
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RN 253585-60-3 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-propenyl ester, polymer with butyl 2-propenoate, 2-methyl-1-propene and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

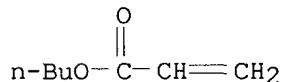
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CRN 2530-85-0  
 CMF C10 H20 O5 Si



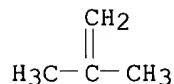
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CRN 141-32-2  
 CMF C7 H12 O2



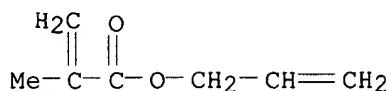
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CRN 115-11-7  
 CMF C4 H8



CM 4

CRN 96-05-9  
 CMF C7 H10 O2



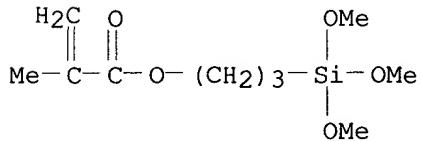
RN 253585-61-4 HCPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, 2-methyl-1-propene, 2-propenyl 2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

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CRN 2530-85-0

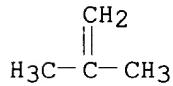
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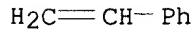
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CM 3

CRN 100-42-5

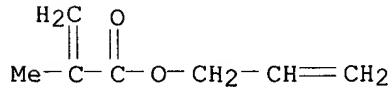
CMF C8 H8



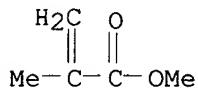
CM 4

CRN 96-05-9

CMF C7 H10 O2



CM 5

CRN 80-62-6  
CMF C5 H8 O2

L51 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2002 ACS  
 AN 1999:331422 HCAPLUS  
 DN 131:19777  
 TI Impact-resistant thermoplastic resin **compositions** containing  
     grafted isobutylene-siloxane rubbers  
 IN Aoyama, Taizo; Kimura, Katsuhiko  
 PA Kanegafuchi Chemical Industry Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 14 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C08L019-00  
 CC 37-6 (**Plastics** Manufacture and Processing)  
     Section cross-reference(s): 39

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11140232 US 6201064	A2 B1	19990525 20010313	JP 1997-304589 US 1998-185719	19971106 19981104
PRAI	JP 1997-304589 JP 1998-40165	A A	19971106 19980223		
AB	Title <b>compns.</b> contain (A) vinyl monomer-grafted composite rubbers, which comprise isobutylene polymers, organopolysiloxanes, and optional vinyl polymers, and (B) thermoplastic resins. Thus, 80 parts Si-terminated polyisobutylene was treated with 0.8 part .gamma.-methacryloyloxypropyltrimethoxysilane (I) and polymd. with octamethyltetracyclosiloxane 20, (EtO)4Si 0.6, and I 0.2 part to give a composite rubber, 80 parts of which was grafted with 18.0 parts Me methacrylate and 2.0 parts Bu acrylate to give a graft copolymer. S 1008 (PVC) 100, dibutyltin maleate 3, stearic acid 0.5, and the graft copolymer 10 parts were kneaded and hot pressed to give a sheet showing Izod impact strength 130 kg-cm/cm <sup>2</sup> and good weather resistance.				
ST	impact resistant thermoplastic <b>compn</b> graft rubber; isobutylene siloxane rubber acrylate grafted impact resistance improver; PVC graft rubber <b>compn</b> impact resistance				
IT	Polyesters, properties RL: POF (Polymer in formulation); PRP (Properties); USES (Uses) (arom.; impact-resistant thermoplastic resin <b>compns.</b> contg. grafted isobutylene-siloxane rubbers)				
IT	Impact-resistant materials (impact-resistant thermoplastic resin <b>compns.</b> contg. grafted isobutylene-siloxane rubbers)				
IT	Polyamides, properties Polycarbonates, properties Polyesters, properties Polyimides, properties Polyolefins Polyoxymethylenes, properties				

Polyoxyphenylenes  
Polysulfones, properties  
Polythiophenylenes  
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(impact-resistant thermoplastic resin compns. contg. grafted  
isobutylene-siloxane rubbers)

IT Polyketones  
Polyketones  
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(polyether-; impact-resistant thermoplastic resin compns.  
contg. grafted isobutylene-siloxane rubbers)

IT Polyethers, properties  
Polyethers, properties  
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(polyketone-; impact-resistant thermoplastic resin compns.  
contg. grafted isobutylene-siloxane rubbers)

IT Silsesquioxanes  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP  
(Properties); PREP (Preparation); USES (Uses)  
(polysiloxane-silicate-, acrylic, graft, impact resistance improvers;  
impact-resistant thermoplastic resin compns. contg. grafted  
isobutylene-siloxane rubbers)

IT Silsesquioxanes  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP  
(Properties); PREP (Preparation); USES (Uses)  
(silicate-polysiloxane-, acrylic, graft, impact resistance improvers;  
impact-resistant thermoplastic resin compns. contg. grafted  
isobutylene-siloxane rubbers)

IT Polysiloxanes, preparation  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP  
(Properties); PREP (Preparation); USES (Uses)  
(silicate-silsesquioxane-, acrylic, graft, impact resistance improvers;  
impact-resistant thermoplastic resin compns. contg. grafted  
isobutylene-siloxane rubbers)

IT Plastics, properties  
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(thermoplastics; impact-resistant thermoplastic resin compns.  
contg. grafted isobutylene-siloxane rubbers)

IT 26007-55-6, Apel 6013  
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(Apel 6013; impact-resistant thermoplastic resin compns.  
contg. grafted isobutylene-siloxane rubbers)

IT 24936-68-3, L 1250, properties  
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(L 1250; impact-resistant thermoplastic resin compns. contg.  
grafted isobutylene-siloxane rubbers)

IT 9002-86-2, S 1008  
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(S 1008; impact-resistant thermoplastic resin compns. contg.  
grafted isobutylene-siloxane rubbers)

IT 226224-99-3P 226225-00-9P  
RL: IMF (Industrial manufacture); MOA (Modifier or additive  
use); PRP (Properties); PREP (Preparation); USES (Uses)  
(impact resistance improver; impact-resistant thermoplastic resin  
compns. contg. grafted isobutylene-siloxane rubbers)

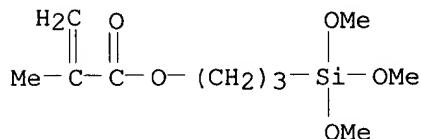
IT 9003-07-0, Noblen D 501 9003-53-6, Polystyrene 9003-54-7,  
Acrylonitrile-styrene copolymer 9011-14-7, Poly(methyl methacrylate)  
24968-12-5, Duranex 2002 25037-45-0 26062-94-2  
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(impact-resistant thermoplastic resin compns. contg. grafted

isobutylene-siloxane rubbers)  
 IT 226224-99-3P 226225-00-9P  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); PREP (Preparation); USES (Uses)  
 (impact resistance improver; impact-resistant thermoplastic resin compns. contg. grafted isobutylene-siloxane rubbers)  
 RN 226224-99-3 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2-methyl-1-propene, octamethylcyclotetrasiloxane, silicic acid (H<sub>4</sub>SiO<sub>4</sub>) tetraethyl ester and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 2530-85-0

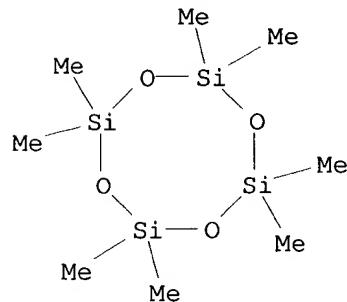
CMF C10 H20 O5 Si



CM 2

CRN 556-67-2

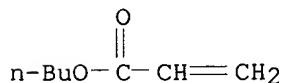
CMF C8 H24 O4 Si4



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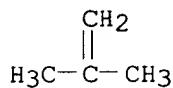
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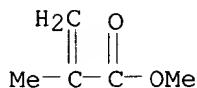
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CRN 115-11-7  
 CMF C4 H8



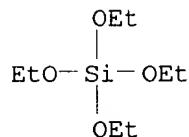
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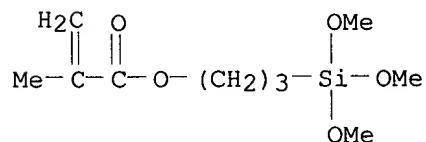
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RN 226225-00-9 HCAPLUS  
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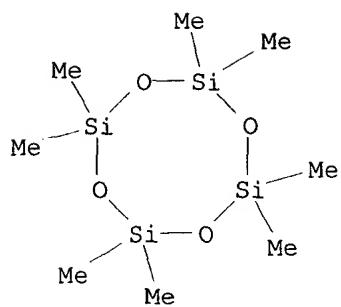
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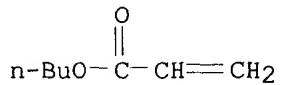


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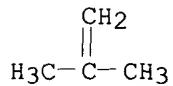
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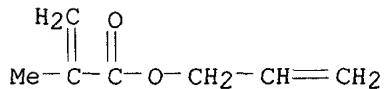
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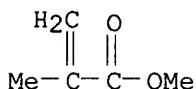
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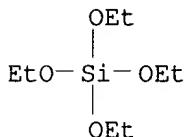
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CM 6

CRN 80-62-6  
CMF C5 H8 O2



CM 7

CRN 78-10-4  
CMF C8 H20 O4 Si

L51 ANSWER 9 OF 18 HCPLUS COPYRIGHT 2002 ACS  
 AN 1999:201841 HCPLUS  
 DN 130:253109  
 TI Double glazing with reactive silicon-containing saturated hydrocarbon polymer **composition**-based spacer  
 IN Shibuya, Takashi; Kodera, Shogo; Matsuyama, Yoshitaka; Yokoyama, Mika  
 PA Asahi Glass Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 16 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C03C027-06  
 ICS E06B003-66  
 CC 37-6 (**Plastics** Manufacture and Processing)  
 Section cross-reference(s): 57  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11079797	A2	19990323	JP 1997-233016	19970828
AB	Title double glazing is composed of .gtoreq.2 oppositely arranged glass plates with a hollow layer spacer comprising a crosslinked satd. hydrocarbon polymer <b>compn.</b> contg. reactive silicon groups with 50-100% gelation fraction after crosslinking. Thus a double glazing composed of 2 glass plates arranged with a 6 mm interval having a spacer <b>compn.</b> comprising isobutylene-trimethoxyvinylsilane copolymer 100, dibutyltin dilaurate 5, hydrogenated polybutene 50, calcium carbonate 50, carbon black 50, trimethoxyaminosilane 5, 2-mercaptopbenzothiazol 0.5, and zeolite 4A powder 50 parts with gelation fraction 95% after crosslinking was prep'd., showing spacer hardness 70, initial dew-point -55.degree., and dew-point after accelerated durability test <-60.degree..				
ST	satd hydrocarbon polymer siloxane <b>compn</b> double glazing;				
IT	isobutylene trimethoxyvinylsilane copolymer <b>compn</b> double glazing				
IT	Carbon black, uses				
	RL: MOA (Modifier or additive use); USES (Uses) (filler; for prepn. of reactive silicon-contg. satd. hydrocarbon polymer <b>compn.</b> -based spacer for double glazing)				
IT	Antioxidants				
	Crosslinking catalysts				
	Fillers				

Plasticizers  
(for prepn. of reactive silicon-contg. satd. hydrocarbon polymer  
compn.-based spacer for double glazing)

IT Glass, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(for prepn. of reactive silicon-contg. satd. hydrocarbon polymer  
compn.-based spacer for double glazing)

IT Crosslinking  
(in prepn. of reactive silicon-contg. satd. hydrocarbon polymer  
compn.-based spacer for double glazing)

IT Dew point  
Hardness (mechanical)  
(of reactive silicon-contg. satd. hydrocarbon polymer compn  
.-based spacer for double glazing)

IT Polysiloxanes, preparation  
Polysiloxanes, preparation  
RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic  
preparation); TEM (Technical or engineered material use); PREP  
(Preparation); USES (Uses)  
(polycarbosilane-; prepn. of reactive silicon-contg. satd. hydrocarbon  
polymer compn.-based spacer for double glazing)

IT Glazing (ceramic)  
(prepn. of reactive silicon-contg. satd. hydrocarbon polymer  
compn.-based spacer for double glazing)

IT Polycarbosilanes  
Polycarbosilanes  
RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic  
preparation); TEM (Technical or engineered material use); PREP  
(Preparation); USES (Uses)  
(siloxane-; prepn. of reactive silicon-contg. satd. hydrocarbon polymer  
compn.-based spacer for double glazing)

IT 149-30-4, 2(3H)-Benzothiazolethione  
RL: MOA (Modifier or additive use); USES (Uses)  
(antioxidant; for prepn. of reactive silicon-contg. satd. hydrocarbon  
polymer compn.-based spacer for double glazing)

IT 77-58-7, Dibutyltin dilaurate  
RL: CAT (Catalyst use); USES (Uses)  
(catalysts; for prepn. of reactive silicon-contg. satd. hydrocarbon  
polymer compn.-based spacer for double glazing)

IT 9003-17-2DP, Polybutadiene, hydrogenated, trimethoxysilyl-terminated  
9003-27-4DP, Isobutylene homopolymer, trimethoxysilyl-terminated  
9003-31-0DP, Isoprene homopolymer, hydrogenated, trimethoxysilyl-  
terminated 9010-85-9DP, Isobutylene-isoprene copolymer,  
trimethoxysilyl-terminated 221666-47-3P, Isobutylene-  
trimethoxyvinylsilane copolymer  
RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic  
preparation); TEM (Technical or engineered material use); PREP  
(Preparation); USES (Uses)  
(crosslinked; prepn. of reactive silicon-contg. satd. hydrocarbon  
polymer compn.-based spacer for double glazing)

IT 471-34-1, Calcium carbonate, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(filler; for prepn. of reactive silicon-contg. satd. hydrocarbon  
polymer compn.-based spacer for double glazing)

IT 21692-64-8  
RL: MOA (Modifier or additive use); USES (Uses)  
(modifier; for prepn. of reactive silicon-contg. satd. hydrocarbon  
polymer compn.-based spacer for double glazing)

IT 9003-29-6D, Polybutene, hydrogenated  
RL: MOA (Modifier or additive use); USES (Uses)

(plasticizer; for prepn. of reactive silicon-contg. satd. hydrocarbon polymer compn.-based spacer for double glazing)

IT 221666-47-3P, Isobutylene-trimethoxyvinylsilane copolymer  
 RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (crosslinked; prepn. of reactive silicon-contg. satd. hydrocarbon polymer compn.-based spacer for double glazing)

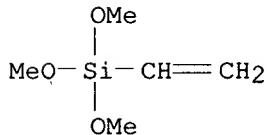
RN 221666-47-3 HCPLUS

CN Silane, ethenyltrimethoxy-, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

CM 1

CRN 2768-02-7

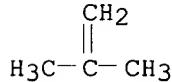
CMF C5 H12 O3 Si



CM 2

CRN 115-11-7

CMF C4 H8



L51 ANSWER 10 OF 18 HCPLUS COPYRIGHT 2002 ACS

AN 1998:586393 HCPLUS

DN 129:246330

TI Polysiloxane-based copolymers with excellent coatability and coating application on moldings of the same

IN Fujisawa, Hiroshi; Sakaguchi, Masashi; Takase, Junji

PA Kanegafuchi Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08G077-442

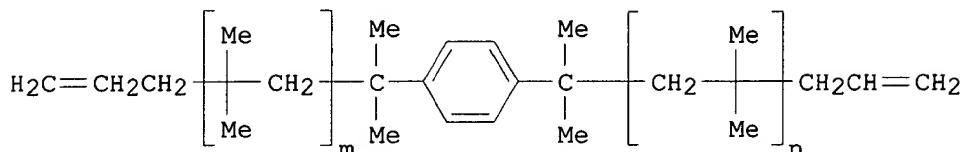
ICS C08G081-02; C09D183-10

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10237176	A2	19980908	JP 1997-38036	19970221
GI					



AB The claimed copolymers are consist of satd. hydrocarbon polymer units and polysiloxane units. Preferably, the polysiloxane-based units may be represented by  $\text{Si}(\text{On}-1+w\text{RxHy})$  ( $\text{R} = \text{C1-20 monovalent org. group}$ ;  $n \geq 0$ ;  $w = \text{no. of cyclic structure in the polymer}$ ;  $x, y \geq 0$ ;  $x + y = 2n + 2 - 2w$ ). Also claimed is application of coatings on moldings of the copolymers. Thus, 5.49 g I was reacted with 3.98 g dimethylsilyl-terminated di-Me siloxane at 70.degree. in the presence of bis(1,3-divinyl-1,1,3,3-tetramethyldisiloxane)-Pt complex to give a block copolymer ( $M_n 19,800$ ), which was blended with H polysiloxane and a Pt-based catalyst and **cured** to give a molding showing excellent coatability to an aq. acrylic coating.

ST coatability siloxane hydrocarbon block polymer molding; isobutylene hydrocarbon polymer polysiloxane block molding

IT Polysiloxanes, uses  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(hydrogen, reaction products with block copolymers contg.  
isobutylene-based polymer units and polysiloxane units;  
polysiloxane-contg. copolymer moldings including satd.  
isobutylene-based polymer units and showing good coatability)

IT Aromatic hydrocarbons, uses  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(isobutylene-based, vinyl-terminated, polymers with polysiloxanes;  
polysiloxane-based copolymers with excellent coatability and coating application on moldings of the same)

IT Polysiloxanes, uses  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polysiloxane-contg. copolymer moldings including satd.  
isobutylene-based polymer units and showing good coatability)

IT 9003-27-4D, allyl-terminated 31900-57-9D, Dimethylsilanediol homopolymer, dimethylsilyl-terminated 115254-29-0  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(in prepn. of coatability-improved polymer moldings contg. satd.  
hydrocarbon polymer units and polysiloxane units)

IT 213119-85-8P  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polysiloxane-contg. copolymer moldings including satd.  
isobutylene-based polymer units and showing good coatability)

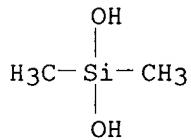
IT 213119-85-8P  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polysiloxane-contg. copolymer moldings including satd.  
isobutylene-based polymer units and showing good coatability)

RN 213119-85-8 HCPLUS

CN Silanediol, dimethyl-, polymer with 2-methyl-1-propene, block (9CI) (CA INDEX NAME)

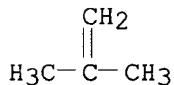
CM 1

CRN 1066-42-8  
CMF C2 H8 O2 Si



CM 2

CRN 115-11-7  
CMF C4 H8



L51 ANSWER 11 OF 18 HCPLUS COPYRIGHT 2002 ACS  
 AN 1998:304179 HCPLUS  
 DN 128:322599  
 TI Curable compositions containing polymers having reactive silicon-containing functional groups  
 IN Chiba, Makoto; Okamoto, Toshihiko; Sakaguchi, Masashi; Takase, Jyunji  
 PA Kaneka Corp., Japan  
 SO Eur. Pat. Appl., 17 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 IC ICM C08L101-10  
 CC 38-3 (Plastics Fabrication and Uses)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 839872	A2	19980506	EP 1997-402576	19971030
	EP 839872	A3	19980729		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	CA 2219765	AA	19980501	CA 1997-2219765	19971031
	JP 10182991	A2	19980707	JP 1997-300640	19971031
	JP 10182992	A2	19980707	JP 1997-300641	19971031
	JP 10204303	A2	19980804	JP 1997-299766	19971031
	JP 10205013	A2	19980804	JP 1997-300642	19971031
	US 6025445	A	20000215	US 1997-963354	19971103
PRAI	JP 1996-291536		19961101		
	JP 1996-293043		19961105		
	JP 1996-293044		19961105		
	JP 1996-308870		19961120		
AB	Curable compns. with good storage stability, useful as				

adhesives, are prep'd. by mixing (a) satd. hydrocarbon polymers contg. Si-contg. groups which have hydrolyzable groups bonded to the Si atom and which are crosslinkable by forming siloxane bonds with (b) a curing agent contg. water or a hydrated metal salt and a silanol condensation catalyst. A typical reactive Si-contg. hydrocarbon polymer was manufd. by polymn. of isobutylene 2 h in the presence of 1,4-bis(2-chloro-2-propyl)benzene, TiCl<sub>4</sub>, allyltrimethylsilane in PhMe-hexane mixt. at -70.degree., and reaction of the allyl-terminated polymer with MeSi(OMe)<sub>2</sub> in the presence of a Pt-vinylsiloxane complex at 70.degree..

ST storage stable **curable** hydrocarbon polymer adhesive; water **curing** agent adhesive; isobutylene allyltrimethylsilane copolymer methoxysilyl terminated adhesive; silanol condensation catalyst adhesive; hydrated metal salt **curing** agent adhesive; silane terminated **curable** hydrocarbon polymer adhesive

IT Sealing compositions  
(**curable compns.** contg. polymers having reactive silicon-contg. functional groups)

IT Hydrates  
RL: CAT (Catalyst use); USES (Uses)  
(**curing** catalyst; **curable compns.** contg. polymers having reactive silicon-contg. functional groups)

IT Crosslinking catalysts  
(silanol condensation catalyst mixts. with water or hydrated metal salts; **curable compns.** contg. polymers having reactive silicon-contg. functional groups)

IT Adhesives  
(two-component; **curable compns.** contg. polymers having reactive silicon-contg. functional groups)

IT 16881-77-9DP, Methyltrimethoxysilane, reaction products with allyl-terminated polyisobutylene **162496-98-2DP**, Allyltrimethylsilane-isobutylene copolymer, reaction products with methyltrimethoxysilane  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(**curable compns.** contg. polymers having reactive silicon-contg. functional groups)

IT 14567-58-9, Mirabilite  
RL: CAT (Catalyst use); USES (Uses)  
(**curing** catalyst; **curable compns.** contg. polymers having reactive silicon-contg. functional groups)

IT 1067-55-6, Dibutyltin dimethoxide 22673-19-4, U-220  
RL: CAT (Catalyst use); USES (Uses)  
(silanol condensation catalyst; **curable compns.** contg. polymers having reactive silicon-contg. functional groups)

IT **162496-98-2DP**, Allyltrimethylsilane-isobutylene copolymer, reaction products with methyltrimethoxysilane  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(**curable compns.** contg. polymers having reactive silicon-contg. functional groups)

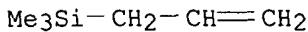
RN 162496-98-2 HCAPLUS

CN Silane, trimethyl-2-propenyl-, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

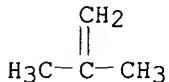
CM 1

CRN 762-72-1

CMF C6 H14 Si



CM 2

CRN 115-11-7  
CMF C4 H8

L51 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2002 ACS  
 AN 1997:701865 HCAPLUS  
 DN 127:347104  
 TI Preparation of stable silicone foam control **compositions**  
 containing reaction products of polyisobutylene/polyorganosiloxane/silicon  
 compound  
 IN Datz-Siegel, Teresa Lynn; Fey, Kenneth Christopher  
 PA Dow Corning Corporation, USA  
 SO Eur. Pat. Appl., 7 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 IC ICM C08L083-04  
 CC 37-6 (**Plastics** Manufacture and Processing)  
 Section cross-reference(s): 40, 42, 43, 46  
 FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 802228	A2	19971022	EP 1997-106120	19970415
	EP 802228	A3	19980325 R: DE, FR, GB, IT, SE, FI		
	US 5777059	A	19980707	US 1996-635043	19960419
	JP 10052603	A2	19980224	JP 1997-101891	19970418
PRAI	US 1996-635043	A	19960419		
AB	Title <b>compn.</b> having phase sepn. resistance, useful as defoamer in various media such as inks, paints, detergents, pulp, paper, textile dyes and hydrocarbon fluids, is prep'd. by reacting a polyisobutylene, a polyorganosiloxane and a silicon compd selected from (A) $\text{RcSiX}_4-\text{c}$ ( $\text{R} = \text{C}_1\text{-5 monovalent hydrocarbon group}$ ; $\text{X} = \text{H}$ , hydrolyzable group and $\text{c} = 1\text{toreq.}1$ ), (B) a partially hydrolyzed of A, (C) a siloxane resin contg. $(\text{CH}_3)_3\text{SiO}_1/2$ and $\text{SiO}_4/2$ units or (D) a condensate of C with A or B. Thus, Indopol L 14 (vinyl-terminated polyisobutylene) 55, OH-terminated polydimethylsiloxane 39 and polyethyl silicate 5.9 parts were reacted in the presence of ethanoic KOH (K content 40 ppm), and neutralized with a combination of $\text{CaCO}_3$ and dry ice to give a cloudy, yellowish liq. showing stable and no phase sepn. and viscosity apprx. 9700 mPa.				
ST	silicone foam control agent stability; deforming agent silicone foam producing system; polyisobutylene polyorganosiloxane silicon compd reaction; vinyl terminated polyisobutylene deforming agent; hydroxy terminated polydimethylsiloxane foam control agent; polyethyl silicate reaction product deforming agent; ink silicone antifoaming agent; coating				

silicone antifoaming agent; paint silicone antifoaming agent; detergent  
silicone antifoaming agent; pulp silicone antifoaming agent; paper  
silicone antifoaming agent; dye silicone antifoaming agent

IT Inks  
(Polysiloxanes; prepn. of stable silicone foam control **compns**.  
. contg. reaction products of polyisobutylene/polyorganosiloxane/silico  
n compd. for)

IT Polysiloxanes, preparation  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM  
(Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyisobutylene-; prepn. of stable silicone foam control  
**compns.** contg. reaction products of  
polyisobutylene/polyorganosiloxane/silicon compd.)

IT Antifoaming agents  
(prepn. of stable silicone foam control **compns**. contg.  
reaction products of polyisobutylene/polyorganosiloxane/silicon compd.)

IT Cellulose pulp  
Coating materials  
Detergents  
Paints  
Paper  
(prepn. of stable silicone foam control **compns**. contg.  
reaction products of polyisobutylene/polyorganosiloxane/silicon compd.  
for)

IT Dyes  
(textile; prepn. of stable silicone foam control **compns**.  
contg. reaction products of polyisobutylene/polyorganosiloxane/silicon  
compd. for)

IT 9003-27-4DP, Polyisobutylene, terminated with (un)satd. groups, polymer  
with polysiloxanes and silicates 197863-56-2P, Ethyl  
silicate-hydroxy-terminated polydimethylsiloxane-Indopol L 14 copolymer  
197863-57-3P **198084-99-0P**  
RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
TEM (Technical or engineered material use); PREP (Preparation);  
USES (Uses)  
(prepn. of stable silicone foam control **compns**. contg.  
reaction products of polyisobutylene/polyorganosiloxane/silicon compd.)

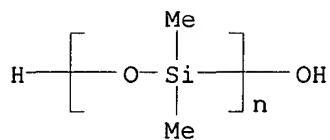
IT **198084-99-0P**  
RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
TEM (Technical or engineered material use); PREP (Preparation);  
USES (Uses)  
(prepn. of stable silicone foam control **compns**. contg.  
reaction products of polyisobutylene/polyorganosiloxane/silicon compd.)

RN 198084-99-0 HCPLUS

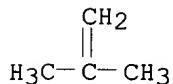
CN Silicic acid, ethyl ester, polymer with .alpha.-hydro-.omega.-  
hydroxypoly[oxy(dimethylsilylene)] and 2-methyl-1-propene (9CI) (CA INDEX  
NAME)

CM 1

CRN 31692-79-2  
CMF (C<sub>2</sub> H<sub>6</sub> O Si)<sub>n</sub> H<sub>2</sub> O  
CCI PMS



CM 2

CRN 115-11-7  
CMF C4 H8

CM 3

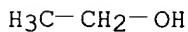
CRN 11099-06-2  
CMF C2 H6 O . x Unspecified

CM 4

CRN 1343-98-2  
CMF Unspecified  
CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 5

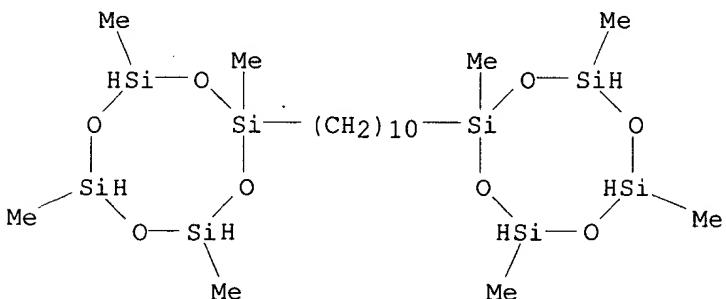
CRN 64-17-5  
CMF C2 H6 O

L51 ANSWER 13 OF 18 HCPLUS COPYRIGHT 2002 ACS  
AN 1997:240374 HCPLUS  
DN 126:226018  
TI Curable compositions for sealing electrolytic condensers with good solvent and heat resistance and gas barrier  
IN Nakagawa, Yoshiki; Sakaguchi, Masafumi; Chinami, Makoto; Hagiwara, Kazuo  
PA Kanegafuchi Chemical Ind, Japan  
SO Jpn. Kokai Tokkyo Koho, 16 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM C08F008-42  
      ICS C08L083-05  
CC 37-6 (Plastics Manufacture and Processing)  
      Section cross-reference(s): 76  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09031125	A2	19970204	JP 1995-201811	19950717
AB	<p>The title <b>compns.</b> contain satd. hydrocarbon polymers having mol. wt. .ltoreq.100,000 and .gtoreq.1 alkenyl or alkynyl group undergoing hydrosilylation, hardeners having mol. wt. .ltoreq.30,000 and .gtoreq.2 hydroxy groups, and hydrosilylation catalysts. A <b>compn.</b> comprised allyl-terminated polyisobutylene 25, 1,10-bis(2,4,6,8-tetramethylcyclotetrasiloxanyl)decane 0.67, and silica 2.5 g with di-Me maleate storage stabilizer, antioxidant, plasticizer, and platinum catalyst.</p>				
ST	electrolytic condenser sealant allyl terminated polyisobutylene; cyclosiloxane hardener allyl terminated polyisobutylene				
IT	<p>Electrolytic capacitors  <b>Potting compositions</b>  <b>Tackifiers</b>            (curable compns. for sealing electrolytic condensers with good solvent and heat resistance and gas barrier)</p>				
IT	<p>188289-59-0P 188289-60-3P, Isobutene-methylphenethylsilanediol-methylsilanediol copolymer            RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)            (curable compns. for sealing electrolytic condensers with good solvent and heat resistance and gas barrier)</p>				
IT	<p>101-68-8, MDI 2530-83-8, A-187 65992-67-8, Tetrad C            RL: MOA (Modifier or additive use); USES (Uses)            (tackifier; curable compns. for sealing electrolytic condensers with good solvent and heat resistance and gas barrier)</p>				
IT	<p>188289-59-0P 188289-60-3P, Isobutene-methylphenethylsilanediol-methylsilanediol copolymer            RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)            (curable compns. for sealing electrolytic condensers with good solvent and heat resistance and gas barrier)</p>				
RN	188289-59-0 HCAPLUS				
CN	Cyclotetrasiloxane, 2,2'-(1,10-decanediyl)bis[2,4,6,8-tetramethyl-, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)				

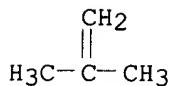
CM 1

CRN 147051-70-5  
 CMF C18 H50 O8 Si8



CM 2

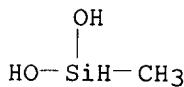
CRN 115-11-7  
CMF C4 H8



RN 188289-60-3 HCPLUS  
CN Silanediol, methyl(2-phenylethyl)-, polymer with 2-methyl-1-propene and methylsilanediol (9CI) (CA INDEX NAME)

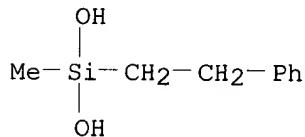
CM 1

CRN 43641-90-3  
CMF C H6 O2 Si



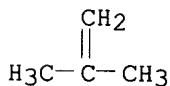
CM 2

CRN 17881-99-1  
CMF C9 H14 O2 Si



CM 3

CRN 115-11-7  
CMF C4 H8



L51 ANSWER 14 OF 18 HCPLUS COPYRIGHT 2002 ACS  
AN 1996:527376 HCPLUS  
DN 125:145323  
TI Thermosetting sealant composition based on hydrosilylation  
IN Shimada, Kazuko; Tsunemi, Hidenari; Ito, Yasushi; Hirabayashi, Tama;  
Hamaguchi, Shigeki  
PA Kanegafuchi Chemical Ind, Japan  
SO Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08G018-38

ICS C08K005-29; C08K005-54; C08L083-05; C08L101-00; H01L023-29;  
H01L023-31

ICA H01G004-224

CC 42-11 (Coatings, Inks, and Related Products)

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

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PI JP 08134165 A2 19960528 JP 1994-293631 19941104

AB A thermosetting resin with good elasticity and adhesion comprises a polymer with .gtoreq.1 unsatd. group and mol. wt. 500-60,000, an org. compd. with .gtoreq.2 hydrosilyl group, a hydrosilylation catalyst, an isocyanate compd., and a silane coupling agent. Thus, an allyl-terminated polyisoprene (I) prep'd. by dehydration of hydroxy-terminated polyisoprene and a reaction product of 1,3,5,7-tetramethylcyclotetrasiloxane with 1,9-decadiene at equal reactive group amt., 3x10-4 mole of platinum-vinylsiloxane catalyst, MDI (3% of I), and triethoxy(3-isocyanatopropyl)silane (I-7840, 3% of I) were applied on a substrate, cured at 130.degree., and pressure-cooked at 121.degree. and 2 atm, showing adhesion 8 to steel, 10 to aluminum, glass, and polyimide in a checkerboard test, both before and after pressure-cooking, and tensile strength to steel 15.8/13.6, to aluminum 17.3/19.5, and to polyimide 6.5/6.3 kgf/cm<sup>2</sup>, before and after pressure-cooking, resp.

ST unsatd polymer hydrosilyl compd thermosetting sealant; coupling agent thermosetting sealant

IT Adhesion

Coupling agents

Sealing compositions

(thermosetting sealant compn. based on hydrosilylation)

IT Polyesters, preparation

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(allyl group-contg., thermosetting sealant compn. based on hydrosilylation)

IT 101-68-8DP, diol derivs., polymers with siloxanes, dienes and diols  
2370-88-9DP, diol derivs., polymers with diisocyanates, dienes and diols  
24801-88-5DP, diol derivs., polymers with siloxanes, isocyanates, and diols  
25248-42-4DP, Poly[oxy(1-oxo-1,6-hexanediyl)], diol derivs., polymers with siloxanes, isocyanates, and dienes 180286-33-3P  
180286-34-4P 180286-35-5P 180286-36-6P 180286-37-7P 180286-38-8P  
180286-39-9P 180286-40-2P 180286-41-3P 180286-42-4P  
**180286-43-5P 180286-44-6P 180286-45-7P**

RL: IMF (Industrial manufacture); PRP (Properties); TEM

(Technical or engineered material use); PREP (Preparation); USES (Uses)

(thermosetting sealant compn. based on hydrosilylation)

IT 1647-16-1DP, 1,9-Decadiene, reaction products with  
tetramethylcyclotetrasiloxane 2370-88-9DP, 1,3,5,7-Tetramethylcyclotetrasiloxane, reaction products with 1,9-decadiene  
9003-17-2DP, Polybutadiene, allyl-terminated 9003-27-4DP, Polyisobutene,  
allyl-terminated 9003-31-ODP, Polyisoprene, allyl-terminated  
24980-41-4DP, Polycaprolactone, allyl-terminated 37273-13-5P,  
Polypropylene glycol diallyl ether 61488-62-8P, Allyl methacrylate-butyl  
acrylate copolymer 125350-47-2P, Poly[oxy(1-oxo-1,6-hexanediyl)],  
.alpha.-2-propenyl-.omega.-(2-propenoxy)-

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(thermosetting sealant compn. based on hydrosilylation)

IT 180286-42-4P 180286-43-5P 180286-44-6P

RL: IMF (Industrial manufacture); PRP (Properties); TEM  
(Technical or engineered material use); PREP (Preparation); USES  
(Uses)

(thermosetting sealant compn. based on hydrosilylation)

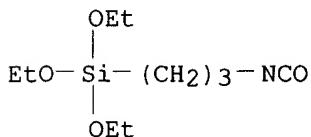
RN 180286-42-4 HCPLUS

CN Cyclotetrasiloxane, 2,4,6,8-tetramethyl-, polymer with 1,9-decadiene,  
1,1'-methylenebis[4-isocyanatobenzene], 2-methyl-1-propene and  
triethoxy(3-isocyanatopropyl)silane (9CI) (CA INDEX NAME)

CM 1

CRN 24801-88-5

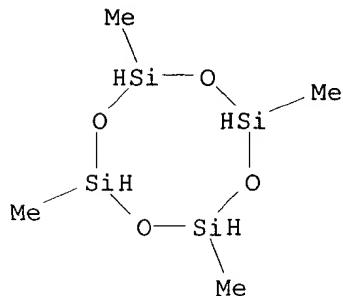
CMF C10 H21 N O4 Si



CM 2

CRN 2370-88-9

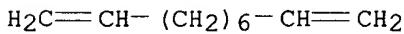
CMF C4 H16 O4 Si4



CM 3

CRN 1647-16-1

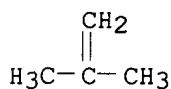
CMF C10 H18



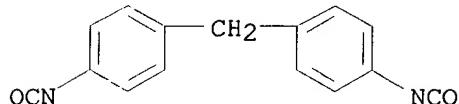
CM 4

CRN 115-11-7

CMF C4 H8



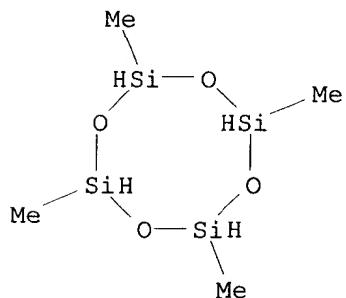
CM 5

CRN 101-68-8  
CMF C15 H10 N2 O2

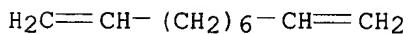
RN 180286-43-5 HCAPLUS

CN Cyclotetrasiloxane, 2,4,6,8-tetramethyl-, polymer with 1,9-decadiene, 6-ethenyl-6-(2-methoxyethoxy)-2,5,7,10-tetraoxa-6-silaundecane, 1,1'-methylenebis[4-isocyanatobenzene] and 2-methyl-1-propene (9CI) (CA INDEX NAME)

CM 1

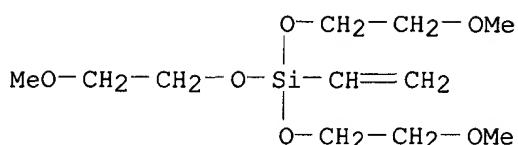
CRN 2370-88-9  
CMF C4 H16 O4 Si4

CM 2

CRN 1647-16-1  
CMF C10 H18

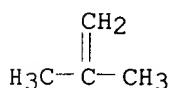
CM 3

CRN 1067-53-4  
CMF C11 H24 O6 Si



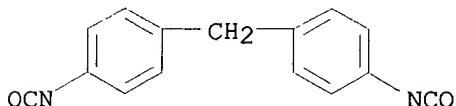
CM 4

CRN 115-11-7  
CMF C4 H8



CM 5

CRN 101-68-8  
CMF C15 H10 N2 O2

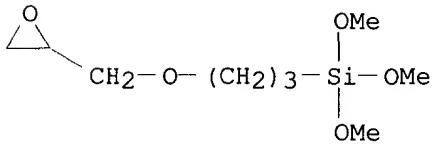


RN 180286-44-6 HCAPLUS

CN Cyclotetrasiloxane, 2,4,6,8-tetramethyl-, polymer with 1,9-decadiene, 1,1'-methylenebis[4-isocyanatobenzene], 2-methyl-1-propene and trimethoxy[3-(oxiranylmethoxy)propyl]silane (9CI) (CA INDEX NAME)

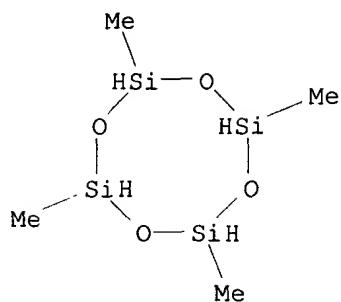
CM 1

CRN 2530-83-8  
CMF C9 H2O 05 Si

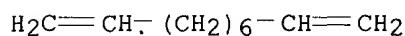


CM 2

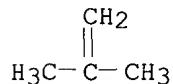
CRN 2370-88-9  
CMF C4 H16 04 Si4



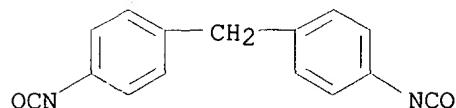
CM 3

CRN 1647-16-1  
CMF C10 H18

CM 4

CRN 115-11-7  
CMF C4 H8

CM 5

CRN 101-68-8  
CMF C15 H10 N2 O2

L51 ANSWER 15 OF 18 HCPLUS COPYRIGHT 2002 ACS  
 AN 1995:275571 HCPLUS  
 DN 122:241806  
 TI Alkenyl-substituted resin compositions curable by  
 hydrosilylation and sealing materials  
 IN Noda, Koji; Ito, Yasushi; Yonezawa, Kazuya; Isurugi, Masakazu  
 PA Kanegafuchi Chemical Ind, Japan  
 SO Jpn. Kokai Tokkyo Koho, 19 pp.  
 CODEN: JKXXAF  
 DT Patent

LA Japanese  
 IC ICM C08L101-02  
 ICS C09K003-10  
 CC 38-3 (Plastics Fabrication and Uses)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06279691	A2	19941004	JP 1993-87801	19930324
AB	<b>Curable compns.</b> contain (a) hydrocarbon crosslinking agents with mol. wt. (M) $\leq 30,000$ including $\geq 2$ SiH groups, (b) satd. hydrocarbon polymers with M $\geq 100,000$ including $\geq 1$ alkenyl group, (c) hydrosilylation catalysts, and (d) adhesion promoters. 1-Component stable sealing materials comprise the <b>compns.</b> and have good weatherability, rapid <b>curability</b> , and adhesion to (in)org. substrates. Thus, 300 g hydrogenated OH-terminated polyisoprene was treated with 47 mL allyl chloride then the resulting polymer (I) was blended with (A) I modified by LS 8600, (B) a Pt-vinylsiloxane complex at (SiH in A):(alkenyl in I):(Pt content in B) = 1.1:1.0:(5 times 10 <sup>-4</sup> ), (C) 1% (based on the amt. of I, A, and B) LS 8600-allyl glycidyl ether (1:2) adduct, and (D) 30% (same as described) di-Me maleate to give title compn. showing gelation time 2 min at 120.degree.. Then, the compn. was applied onto a glass substrate and <b>cured</b> to give a test piece showing good adhesion strength.				
ST	hydroxylated <b>curable compn</b> sealing material; weatherability hydroxylated <b>curable compn</b> ; heat resistance hydroxylated <b>curable compn</b> ; rapid <b>curability</b> hydroxylated <b>curable compn</b> ; one component stability hydroxylated <b>curable compn</b> ; adhesion hydroxylated <b>curable compn</b>				
IT	Epoxy resins, uses RL: MOA (Modifier or additive use); USES (Uses) (additives for supplying adhesion; unsatd. resin <b>compns.</b> <b>curable</b> by hydroxylated for sealants)				
IT	Cyclosiloxanes RL: MOA (Modifier or additive use); USES (Uses) (hydrogen, crosslinking agents; unsatd. resin <b>compns.</b> <b>curable</b> by hydroxylated for sealants)				
IT	Crosslinking agents (hydroxyl-contg.; unsatd. resin <b>compns.</b> <b>curable</b> by hydroxylated for sealants contg.)				
IT	Sealing <b>compositions</b> (unsatd. resin <b>compns.</b> <b>curable</b> by hydroxylated for sealants)				
IT	Hydroxylated catalysts (unsatd. resin <b>compns.</b> <b>curable</b> by hydroxylated for sealants contg.)				
IT	25068-38-6, Epikote 828 RL: MOA (Modifier or additive use); USES (Uses) (additives for supplying adhesion; unsatd. resin <b>compns.</b> <b>curable</b> by hydroxylated for sealants)				
IT	106-92-3DP, Allyl glycidyl ether, reaction products with cyclic siloxanes 13019-22-2DP, 9-Decen-1-ol, reaction products with cyclic siloxanes 113684-53-0P RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses) (agents for supplying adhesion; unsatd. resin <b>compns.</b> <b>curable</b> by hydroxylated for sealants)				
IT	112-38-9, 10-Undecylenic acid 6843-66-9, Diphenyldimethoxysilane RL: MOA (Modifier or additive use); USES (Uses) (agents for supplying adhesion; unsatd. resin <b>compns.</b> )				

curable by hydrosilylation for sealants)

IT 2370-88-9DP, LS 8600, reaction products with allyl-terminated hydrogenated polyisoprene 143848-16-2P  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
 (crosslinking agents; unsatd. resin compns. curable by hydrosilylation for sealants)

IT 7440-06-4D, Platinum, derivs. 15170-57-7 16941-12-1  
 RL: CAT (Catalyst use); USES (Uses)  
 (hydrosilylation catalysts; unsatd. resin compns. curable by hydrosilylation for sealants)

IT 95-16-9, Benzothiazole 288-47-1, Thiazole 624-48-6, Dimethyl maleate  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (storage stability improvers; unsatd. resin compns. curable by hydrosilylation for sealants)

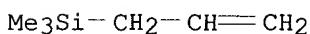
IT 107-05-1DP, Allyl chloride, reaction products with hydrogenated polymers 9003-31-0DP, Polyisoprene, hydrogenated, reaction products with allyl chloride 138749-53-8P, 1,9-Decadiene-isobutylene copolymer 154153-98-7P, Allyl phenyl ether-isobutylene copolymer  
**162496-98-2P**  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 PREP (Preparation); USES (Uses)  
 (unsatd. resin compns. curable by hydrosilylation for sealants)

IT **162496-98-2P**  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 PREP (Preparation); USES (Uses)  
 (unsatd. resin compns. curable by hydrosilylation for sealants)

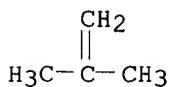
RN 162496-98-2 HCPLUS

CN Silane, trimethyl-2-propenyl-, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

CM 1

CRN 762-72-1  
CMF C6 H14 Si

CM 2

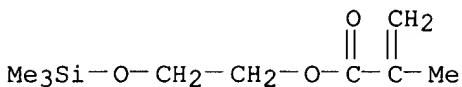
CRN 115-11-7  
CMF C4 H8

L51 ANSWER 16 OF 18 HCPLUS COPYRIGHT 2002 ACS  
 AN 1991:30006 HCPLUS  
 DN 114:30006  
 TI Amphiphilic networks. IV. Synthesis and characterization of, and drug release from poly(2-hydroxyethyl methacrylate)-1-polyisobutylene

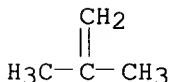
AU Ivan, Bela; Kennedy, Joseph P.; Mackey, Paul W.  
 CS Inst. Polymer Sci., Univ. Akron, Akron, OH, 44325-3909, USA  
 SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1990), 31(2), 217-18  
 CODEN: ACPPAY; ISSN: 0032-3934  
 DT Journal  
 LA English  
 CC 63-5 (Pharmaceuticals)  
 Section cross-reference(s): 35  
 AB Amphiphilic networks comprising poly(2-hydroxyethyl methacrylate) (PHEMA) and polyisobutylene (PIB) segments were synthesized by radical copolymer of 2-trimethylsiloxyethyl methacrylate with methacrylate-telechelic PIB (MA-PIB-MA) followed by acid catalyzed deprotection of the trimethylsilyl groups. Optimum synthetic conditions for networks of satisfactory properties were developed and a series of PHEMA-1-PIB networks of various overall compn. have been prepd. DSC studies indicate microphase sepn. into PHEMA and PIB domains. The amphiphilic nature of PHEMA-1-PIB networks were demonstrated by swelling in both n-heptane and in water. Drug delivery systems have been prepd. by loading the networks with theophylline. Release studies indicate sustained release with anomalous diffusion kinetics.  
 ST hydroxyethyl methacrylate polyisobutylene drug sustained release  
 IT Solution rate  
     (of theophylline, from polyisobutylene-(trimethylsilyloxy)ethyl methacrylate copolymer)  
 IT Pharmaceutical dosage forms  
     (controlled-release, polyisobutylene-(trimethylsilyloxy)ethyl methacrylate copolymer for, prepn. and drug release from)  
 IT 29158-71-2P  
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
         (deprotection of)  
 IT 9003-27-4DP, Polyisobutylene, hydroxy-terminated, methacrylate esters  
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
         (deprotection of, with hydroxyethyl methacrylate)  
 IT 17407-09-9P  
     RL: SPN (Synthetic preparation); PREP (Preparation)  
         (deprotection of)  
 IT 58-55-9, Theophylline, biological studies  
     RL: BIOL (Biological study)  
         (release of, from polyisobutylene-(trimethylsilyloxy)ethyl methacrylate copolymer)  
 IT 868-77-9, 2-Hydroxyethyl methacrylate  
     RL: RCT (Reactant); RACT (Reactant or reagent)  
         (silylation of)  
 IT 130953-45-6P  
     RL: SPN (Synthetic preparation); PREP (Preparation)  
         (triblock, prepn. and theophylline release from)  
 IT 130953-45-6P  
     RL: SPN (Synthetic preparation); PREP (Preparation)  
         (triblock, prepn. and theophylline release from)  
 RN 130953-45-6 HCPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-[(trimethylsilyl)oxy]ethyl ester, polymer with 2-methyl-1-propene, block (9CI) (CA INDEX NAME)

CM 1

 CRN 17407-09-9  
 CMF C9 H18 O3 Si



CM 2

CRN 115-11-7  
CMF C4 H8

L51 ANSWER 17 OF 18 HCPLUS COPYRIGHT 2002 ACS  
 AN 1988:455459 HCPLUS  
 DN 109:55459  
 TI Ambient-crosslinkable isobutene-chlorosilane copolymers  
 IN Licchelli, Maurizio; Greco, Alberto; Lugli, Gabriele  
 PA Enichem Sintesi S.p.A., Italy  
 SO Eur. Pat. Appl., 9 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 IC ICM C08F008-26  
 ICS C08F210-10  
 CC 35-4 (Chemistry of Synthetic High Polymers)  
 Section cross-reference(s): 29, 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 255170	A1	19880203	EP 1987-201367	19870717
	EP 255170	B1	19901031		
	R: AT, BE, CH, DE, ES, FR, GB, GR, LI, LU, NL, SE				
	US 4829130	A	19890509	US 1987-75043	19870717
	AT 57939	E	19901115	AT 1987-201367	19870717
	CA 1288888	A1	19910910	CA 1987-542770	19870722
	JP 63046206	A2	19880227	JP 1987-182432	19870723

PRAI IT 1986-21232 19860723  
 EP 1987-201367 19870717

AB The title polymers, useful in sealants and coatings, are prep'd. by Lewis acid-catalyzed polymn. of isobutene with 0.1-10% silane CH<sub>2</sub>:CHRC<sub>6</sub>H<sub>4</sub>CHR<sub>1</sub>CH<sub>2</sub>Si(R<sub>2</sub>)<sub>n</sub>X<sub>3-n</sub> (R, R<sub>1</sub> = H, Me; R<sub>2</sub> = C<sub>1-5</sub> alkyl; X = Cl, Br; n = 0-2) at -100.degree. to 0.degree. to mol. wt. 2000-50,000, and reaction of the products with C<sub>1-5</sub> alcs. Thus, adding 6 mL 1.5% hexane suspension of AlCl<sub>3</sub> over .apprx.15 min to 25 mL isobutene, 1 g CH<sub>2</sub>:CHC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>Si(Me)Cl<sub>2</sub> (prep'd. by H<sub>2</sub>PtCl<sub>6</sub>-catalyzed addn. of MeSiHCl<sub>2</sub> to divinylbenzene, and 150 mL hexane stirred at -55.degree. to -45.degree., stirring 30 min at -50.degree., and adding 5 mL 1:4 (molar) mixt. of MeOH and propylene oxide (HCl acceptor) gave a polymer with viscosity 10 kPa-s at 50.degree. and mol. wt. 10,000. A 2-mm film of the polymer contg. 1% Bu<sub>2</sub>Sn dilaurate-C<sub>12</sub>H<sub>25</sub>NH<sub>2</sub>, exposed under ambient conditions, was touch-dry in 1-2 h, and 80% gelled in 10 days; and at a const. gel content had 100% modulus 2.92 kg/cm<sup>2</sup>, tensile strength 7.01

kg/cm<sup>2</sup>, and elongation 430%.

ST isobutylene copolymer ambient **curable**; crosslinking ambient isobutene copolymer; chlorosilylethylstyrene copolymer **curable**; styrene dichlorosilylethyl copolymer; divinylbenzene addn dichloromethylsilane

IT Crosslinking  
(room-temp., of unsatd. alkoxysilane-isobutylene copolymers)

IT Coating materials  
Sealing **compositions**  
(room-temp.-**curable**, unsatd. alkoxysilane-isobutylene copolymers for)

IT 67-56-1DP, Methanol, reaction products with unsatd. chlorosilane-isobutylene copolymers 115532-61-1DP, alcoholysis products  
RL: **PREP (Preparation)**  
(ambient-**curable**, manuf. of)

IT 75-56-9, Propylene oxide, uses and miscellaneous  
RL: **USES (Uses)**  
(hydrogen chloride acceptors, in alkoxylation of chlorosilylated polymers)

IT 1321-74-0, Divinylbenzene, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with dichloromethylsilane)

IT 75-54-7, Dichloromethylsilane  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with divinylbenzene)

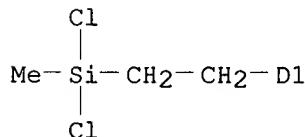
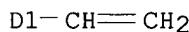
IT 115532-61-1DP, alcoholysis products  
RL: **PREP (Preparation)**  
(ambient-**curable**, manuf. of)

RN 115532-61-1 HCPLUS

CN Silane, dichloro[2-(ethenylphenyl)ethyl]methyl-, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

CM 1

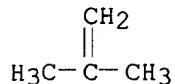
CRN 112508-83-5  
CMF C11 H14 Cl2 Si  
CCI IDS



CM 2

CRN 115-11-7

CMF C4 H8



L51 ANSWER 18 OF 18 HCPLUS COPYRIGHT 2002 ACS  
AN 1984:572745 HCPLUS  
DN 101:172745  
TI Copolymerization of isobutylene with trimethylvinyloxysilane  
AU Gladkikh, I. F.; Sangalov, Yu. A.; Komarov, N. V.; Lisovin, E. G.  
CS Kuban. Gos. Univ., Krasnodar, USSR  
SO Izvestiya Vysshikh Uchebnykh Zavedenii, Khimiya i Khimicheskaya  
Tekhnologiya (1984), 27(6), 707-10  
CODEN: IVUKAR; ISSN: 0579-2991  
DT Journal  
LA Russian  
CC 39-4 (Synthetic Elastomers and Natural Rubber)  
Section cross-reference(s): 35, 37  
AB Polymn. of Me<sub>2</sub>C:CH<sub>2</sub> (I) [115-11-7] with Me<sub>3</sub>SiOCH:CH<sub>2</sub> (II) [6213-94-1] in  
the presence of a catalyst comprising KU-28 [11118-20-0] (a sulfonated  
cation exchanger) and EtAlCl<sub>2</sub> [563-43-9] gave copolymers (III)  
[92450-21-0] contg. 10-80 mol% II units. The monomer reactivity ratios of  
I and II (Fineman-Ross method) were 0.37 .+- . 0.02 and 5.82 .+- . 0.86,  
resp. In the absence of I, II did not polymerize, apparently as a result  
of irreversible sorption on the catalyst. The desorption of II was  
facilitated by the presence of I. Replacement of EtAlCl<sub>2</sub> in the catalyst  
by AlCl<sub>3</sub> resulted in homopolymn. of I and II; no copolymn. was obsd.  
Introduction of II units into polyisobutylene (IV) chains had little  
effect on the elastomeric properties of IV [glass transition temps. (T<sub>g</sub>)  
of IV and III were nearly equal], but hydrolysis of III increased the  
rigidity of its chain, shifting T<sub>g</sub> to higher temps. approaching T<sub>g</sub> of  
poly(vinyl alc.). The temps. of onset of thermal decompn. of III (60 mol%  
II units), hydrolyzed III, and IV were 398, 363, and 473 K, resp.  
ST trimethylvinyloxysilane isobutylene copolymn reactivity; glass temp  
isobutylene trimethylvinyloxysilane copolymer; thermal stability  
isobutylene trimethylvinyloxysilane copolymer; hydrolysis isobutylene  
trimethylvinyloxysilane copolymer; catalyst polymn isobutylene  
trimethylvinyloxysilane; cation exchanger polymn catalyst; ethylaluminum  
chloride polymn catalyst  
IT Polymerization catalysts  
(ethylaluminum chloride-KU-28 cation exchanger, for isobutylene with  
trimethylvinyloxysilane)  
IT Rubber, synthetic  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(isobutylene-trimethylvinyloxysilane, prepn., glass transition temp.  
and thermal stability of)  
IT Reactivity ratio in polymerization  
(of isobutylene with trimethylvinyloxysilane)  
IT Hydrolysis  
(of isobutylene-trimethylvinyloxysilane copolymers)  
IT Glass temperature and transition  
(of isobutylene-trimethylvinyloxysilane copolymers and hydrolyzed  
isobutylene-trimethylvinyloxysilane copolymers, compn. effect  
on)  
IT Sorption  
(of trimethylvinyloxysilane on KU-28 catalyst, polymn. kinetics in

relation to)

IT Chains, chemical  
     (sequence distribution of, of isobutylene-trimethylvinyloxysilane copolymers)

IT Polymer degradation  
     (thermal, of isobutylene-trimethylvinyloxysilane copolymers and hydrolyzed isobutylene-trimethylvinyloxysilane copolymers)

IT 563-43-9, uses and miscellaneous  
   RL: CAT (Catalyst use); USES (Uses)  
     (catalysts, contg. cation exchanger KI-28, for polymn. of isobutylene with trimethylvinyloxysilane)

IT 7446-70-0, uses and miscellaneous  
   RL: CAT (Catalyst use); USES (Uses)  
     (catalysts, contg. cation exchanger KU-28, for polymn. of isobutylene and trimethyl(vinyloxy)silane)

IT 11118-20-0  
   RL: CAT (Catalyst use); USES (Uses)  
     (catalysts, contg. ethylaluminum dichloride, for polymn. of isobutylene with trimethylvinyloxysilane)

IT 6213-94-1  
   RL: RCT (Reactant); RACT (Reactant or reagent)  
     (polymn. of, with isobutylene, monomer reactivity ratios in)

IT 115-11-7, reactions  
   RL: RCT (Reactant); RACT (Reactant or reagent)  
     (polymn. of, with trimethyl(vinyloxy)silane, monomer reactivity ratios in)

IT 92450-21-0DP, hydrolyzed  
   RL: SPN (Synthetic preparation); PREP (Preparation)  
     (prepn., glass transition temp. and thermal stability of)

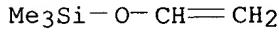
IT 92450-21-0P  
   RL: SPN (Synthetic preparation); PREP (Preparation)  
     (rubber, prepn., glass transition temp. and thermal stability of)

IT 92450-21-0DP, hydrolyzed  
   RL: SPN (Synthetic preparation); PREP (Preparation)  
     (prepn., glass transition temp. and thermal stability of)

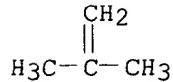
RN 92450-21-0 HCPLUS

CN Silane, (ethenyloxy)trimethyl-, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

CM 1

CRN 6213-94-1  
CMF C5 H12 O Si

CM 2

CRN 115-11-7  
CMF C4 H8

IT 92450-21-0P

RL: **SPN (Synthetic preparation); PREP (Preparation)**

(rubber, prepn., glass transition temp. and thermal stability of)

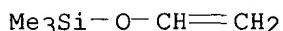
RN 92450-21-0 HCPLUS

CN Silane, (ethenyloxy)trimethyl-, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)

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CRN 6213-94-1

CMF C5 H12 O Si



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CMF C4 H8

